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**Note:**

The Format item specified for each field indicates the section and specific item in the Program Default Database Number Formatting Options form that controls the formatting (units, decimal places, etc.) for the specified field. This form can be accessed using the Options menu > Database > Set Program Default DB Formatting command.

**Table: Advanced Modeling Options****Field: 2DOnly**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if the model is 2D only (UZ, RX and RY DOFs active only). Otherwise it is No.

**Field: RigDiaTop**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if an automatic rigid diaphragm constraint is included at the top of columns and ealls above the Model Datum. Otherwise it is No.

**Field: NoOffsets**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This is Yes if vertical offsets are ignored in non-PT models. Otherwise it is No.

**Table: Advanced SapFire Options****Field: SolverOpt**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Standard, Advanced or Multi-threaded indicating the solver option.

**Field: ProcessOpt**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Auto, GUI or Separate indicating the analysis process option.

**Field: Always32Bit**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This is Yes if the analysis is always run as 32-bit, even on 64-bit computers. Otherwise it is No.

**Table: Automatic Slab Mesh Options****Field: MeshOpt**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Rectangular or None indicating the automatic slab mesh option.

**Field: Localize**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item only applies when the MeshOpt item is Rectangular. This Yes if the mesh is to be localized. Otherwise it is No.

**Field: Merge**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item only applies when the MeshOpt item is Rectangular and the Localize item is Yes. This Yes if closely spaced points are merged where possible. Otherwise it is No.

**Field: MaxSize**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The approximate maximum mesh size. This item does not apply when the MeshOpt item is None.

**Table: Beam Design Overwrites****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a beam-type line object.

**Field: CoverType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Section, Preferences or User indicating how the cover is determined.

**Field: CoverTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the top rebar CGS used when designing the beam. This item only applies when the CoverType is User.

**Field: CoverBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the bottom rebar CGS used when designing the beam. This item only applies when the CoverType is User.

**Field: RLLF**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The reduced live load factor. This factor times the specified reducible live load gives the reduced live load.

**Field: IgnorePT**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This is Yes if the prestressing tendons in the beam object are to be ignored for design; otherwise it is No.

**Table: Beam End Releases****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a beam-type line object.

**Field: TI**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if torsion is released at the I end of the beam. Otherwise it is No.

**Field: M2I**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if moment about the local 2-axis is released at the I end of the beam. Otherwise it is No.

**Field: M3I**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if moment about the local 3-axis is released at the I end of the beam. Otherwise it is No.

**Field: TJ**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if torsion is released at the J end of the beam. Otherwise it is No.

**Field: M2J**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if moment about the local 2-axis is released at the J end of the beam. Otherwise it is No.

**Field: M3J**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This item is Yes if moment about the local 3-axis is released at the J end of the beam.  
 Otherwise it is No.

**Table: Beam Insertion Point****Field: Line**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a beam-type line object.

**Field: CardinalPt**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The cardinal point for the beam. This item defines the relative position of the beam section on the corresponding line object. It may be any one of the following:

- 0 (axes intersection),
- 1 (box corner),
- 2 (box edge midpoint),
- 3 (box corner),
- 4 (box edge midpoint),
- 5 (box center),
- 6 (box edge midpoint),
- 7 (box corner),
- 8 (box edge midpoint),
- 9 (box corner),
- 10 (centroid), and
- 11 (shear center).

**Field: OffsetXI**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

The rigid beam end point offset in the global X direction at the I-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetYI**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid beam end point offset in the global Y direction at the I-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetZI**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid beam end point offset in the global Z direction at the I-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetXJ**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid beam end point offset in the global X direction at the J-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetYJ**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid beam end point offset in the global Y direction at the J-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetZJ**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid beam end point offset in the global Z direction at the J-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Table: Beam Properties 01 - General****Field: Beam**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a beam property.

**Field: Type**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Rectangular, T, L or General indicating the beam property type.

**Field: Color**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either a defined color or an integer representation of the color associated with the beam property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes

Format: Controlled by program

Units: Text

User notes for the specified beam property.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified beam property.

**Table: Beam Properties 02 - Rectangular Beam****Field: Beam**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a beam property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the beam property.

**Field: Depth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The beam depth.

**Field: WidthTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The web width at the top of the beam.

**Field: WidthBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The web width at the bottom of the beam.

**Table: Beam Properties 03 - T Beam****Field: Beam**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a beam property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the beam property.

**Field: TotalDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The total depth of the beam.

**Field: SlabDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The slab (flange) thickness.

**Field: FlngWidth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The flange width.

**Field: WidthTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The stem width at the top.

**Field: WidthBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The stem width at the bottom.

**Field: Inverted**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the beam is inverted (upside down); otherwise it is No.

**Table: Beam Properties 04 - L Beam****Field: Beam**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a beam property.

**Field: MatProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the material for the beam property.

**Field: TotalDepth**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The total depth of the beam.

**Field: SlabDepth**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The slab (flange) thickness.

**Field: FlngWidth**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The flange width.

**Field: WidthTop**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The stem width at the top.

**Field: WidthBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The stem width at the bottom.

**Field: Inverted**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the beam is inverted (upside down); otherwise it is No.

**Table: Beam Properties 05 - General Beam****Field: Beam**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a beam property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the beam property.

**Field: Area**

Field is Imported: Yes  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The beam cross-sectional area.

**Field: As2**

Field is Imported: Yes  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The beam shear area for forces in the line local 2 axis direction.

**Field: As3**

Field is Imported: Yes  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The beam shear area for forces in the line local 3 axis direction.

**Field: J**

Field is Imported: Yes  
Format: Length<sup>4</sup> (Section Dimensions section of form)  
Units: Length<sup>4</sup>

The beam torsional constant.

**Field: I22**

Field is Imported: Yes  
Format: Length<sup>4</sup> (Section Dimensions section of form)  
Units: Length<sup>4</sup>

The beam moment of inertia for bending about the line local 2 axis.

**Field: I33**

Field is Imported: Yes  
Format: Length<sup>4</sup> (Section Dimensions section of form)  
Units: Length<sup>4</sup>

The beam moment of inertia for bending about the line local 3 axis.

**Field: DisDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The depth of the beam for display.

**Field: DisWidth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The width of the beam for display.

**Table: Beam Properties 06 - Design Data****Field: Beam**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a beam property.

**Field: MatRebarL**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material property for the longitudinal rebar.

**Field: MatRebarS**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material property for the shear rebar.

**Field: FIngWOpt**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Analysis Property, Slab Property or User Specified indicating the source of the flange dimensions.

**Field: FIngWidth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The flange width used for design. This item can be input as 0 for rectangular beams. This item only applies when the AutoFIngW item is No.

**Field: SlabDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The slab (flange) thickness used for design. This item can be input as 0 for rectangular beams. This item only applies when the AutoFIngW item is No.

**Field: CoverTop**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

The rebar cover at the top of the beam measured to the rebar centroid.

**Field: CoverBot**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

The rebar cover at the bottom of the beam measured to the rebar centroid.

**Field: NoDesign**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This item is Yes if no design is performed for the slab; otherwise it is No.

**Table: Beam Property Assignments****Field: Line**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a beam-type line object.

**Field: BeamProp**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The beam property assigned to the specified line object.

**Table: Beam Property Modifiers****Field: Line**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a beam-type line object.

**Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The Area modifier for the specified beam. This item is used for analysis only, not design.

**Field: As2**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The As2 modifier for the specified beam. This item is used for analysis only, not design.

**Field: As3**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The As3 modifier for the specified beam. This item is used for analysis only, not design.

**Field: J**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The J modifier for the specified beam. This item is used for analysis only, not design.

**Field: I22**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The I22 modifier for the specified beam. This item is used for analysis only, not design.

**Field: I33**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The I33 modifier for the specified beam. This item is used for analysis only, not design.

**Field: Weight**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The Weight multiplier for the specified beam. This item is used for analysis only, not design.

**Table: Column End Releases****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column-type or brace-type line object.

**Field: TI**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if torsion is released at the I end of the column. Otherwise it is No.

**Field: M2I**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if moment about the local 2-axis is released at the I end of the column. Otherwise it is No.

**Field: M3I**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if moment about the local 3-axis is released at the I end of the column. Otherwise it is No.

**Field: TJ**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if torsion is released at the J end of the column. Otherwise it is No.

**Field: M2J**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This item is Yes if moment about the local 2-axis is released at the J end of the column.  
 Otherwise it is No.

**Field: M3J**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This item is Yes if moment about the local 3-axis is released at the J end of the column.  
 Otherwise it is No.

**Table: Column Insertion Point****Field: Line**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a column-type or brace-type line object.

**Field: CardinalPt**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The cardinal point for the column. This item defines the relative position of the column section on the corresponding line object. It may be any one of the following:

- 0 (axes intersection),
- 1 (box corner),
- 2 (box edge midpoint),
- 3 (box corner),
- 4 (box edge midpoint),
- 5 (box center),
- 6 (box edge midpoint),
- 7 (box corner),
- 8 (box edge midpoint),
- 9 (box corner),
- 10 (centroid), and
- 11 (shear center).

**Field: OffsetXI**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid column end point offset in the global X direction at the I-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetYI**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid column end point offset in the global Y direction at the I-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetZI**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid column end point offset in the global Z direction at the I-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetXJ**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid column end point offset in the global X direction at the J-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetYJ**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid column end point offset in the global Y direction at the J-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Field: OffsetZJ**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The rigid column end point offset in the global Z direction at the J-end of the line object. A positive offset is measured from the point location to the end of the line object (at the cardinal point) in the positive global coordinate direction.

**Table: Column Local Axes****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column-type or brace-type line object.

**Field: Angle**

Field is Imported: Yes  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle in degrees measured from the positive global X-axis to the positive column local 2-axis. A positive angle appears counterclockwise when looking down on the model.

**Table: Column Properties 01 - General****Field: Column**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column property.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Rectangular, Circular, T, L or General indicating the beam property type.

**Field: Color**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either a defined color or an integer representation of the color associated with the column property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified column property.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified column property.

**Table: Column Properties 02 - Rectangular****Field: Column**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the column property.

**Field: SecDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column section dimension in its local 2-axis direction.

**Field: SecDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column section dimension in its local 3-axis direction.

**Field: AutoRigid**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if an rigid zone area over the column is automatically included for the column. Otherwise it is No.

**Field: AutoDrop**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if an drop panel over the column is automatically included for the column. Otherwise it is No.

**Field: DropDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 2-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 3-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The slab property used for the drop panel. This item only applies when the AutoDrop item is Yes.

**Field: IncludeCap**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if a column capital (drop cap) is included at the column. Otherwise it is No.

**Field: CapDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column capital (drop cap) dimension in its local 2-axis direction. This item only applies when the IncludeCap item is Yes.

**Field: CapDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column capital (drop cap) dimension in its local 3-axis direction. This item only applies when the IncludeCap item is Yes.

**Field: CapHt**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column capital (drop cap) height (in the global Z direction). This item only applies when the IncludeCap item is Yes.

**Table: Column Properties 03 - Circular****Field: Column**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the column property.

**Field: Diameter**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column diameter.

**Field: AutoRigid**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if an rigid zone area over the column is automatically included for the column. Otherwise it is No.

**Field: AutoDrop**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if an drop panel over the column is automatically included for the column. Otherwise it is No.

**Field: DropDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 2-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 3-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The slab property used for the drop panel. This item only applies when the AutoDrop item is Yes.

**Field: IncludeCap**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if a column capital (drop cap) is included at the column. Otherwise it is No.

**Field: CapDiam**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column capital diameter.

**Field: CapHt**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column capital height (in global Z direction).

**Table: Column Properties 04 - T Shape****Field: Column**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the column property.

**Field: TotalDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column depth (in its local 2 direction).

**Field: FlnWidth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column flange width (in its local 2 direction).

**Field: FlnThick**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column flange thickness (in its local 2 direction).

**Field: WebThick**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column web thickness (in its local 3 direction).

**Field: AutoDrop**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if a drop panel over the column is automatically included for the column. Otherwise it is No.

**Field: DropDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 2-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 3-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The slab property used for the drop panel. This item only applies when the AutoDrop item is Yes.

**Table: Column Properties 05 - L Shape****Field: Column**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the material for the column property.

**Field: TotalDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column depth (in its local 2 direction).

**Field: FngWidth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column flange width (in its local 3 direction).

**Field: FngThick**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column flange thickness (in its local 2 direction).

**Field: WebThick**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The column web thickness (in its local 3 direction).

**Field: AutoDrop**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if an drop panel over the column is automatically included for the column. Otherwise it is No.

**Field: DropDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 2-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 3-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The slab property used for the drop panel. This item only applies when the AutoDrop item is Yes.

**Table: Column Properties 06 - General Shape****Field: Column**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a column property.

**Field: MatProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the material for the column property.

**Field: SecDim2**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The column depth (in its local 2 direction).

**Field: SecDim3**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The column width (in its local 3 direction).

**Field: AutoRigid**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if an rigid zone area over the column is automatically included for the column. Otherwise it is No.

**Field: AutoDrop**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if a drop panel over the column is automatically included for the column. Otherwise it is No.

**Field: DropDim2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 2-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropDim3**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The drop panel dimension in its local 3-axis direction. This item only applies when the AutoDrop item is Yes.

**Field: DropProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The slab property used for the drop panel. This item only applies when the AutoDrop item is Yes.

**Field: Area**

Field is Imported: Yes  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The column cross-sectional area.

**Field: As2**

Field is Imported: Yes  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The column shear area for forces in the column local 2 axis direction.

**Field: As3**

Field is Imported: Yes  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The column shear area for forces in the column local 3 axis direction.

**Field: J**

Field is Imported: Yes  
Format: Length<sup>4</sup> (Section Dimensions section of form)  
Units: Length<sup>4</sup>

The column torsional constant.

**Field: I22**

Field is Imported: Yes  
Format: Length<sup>4</sup> (Section Dimensions section of form)  
Units: Length<sup>4</sup>

The column moment of inertia for bending about the column local 2 axis.

**Field: I33**

Field is Imported: Yes  
Format: Length<sup>4</sup> (Section Dimensions section of form)  
Units: Length<sup>4</sup>

The column moment of inertia for bending about the column local 3 axis.

**Table: Column Property Assignments****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column-type or brace-type line object.

**Field: ColProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is the name of a defined column property.

**Table: Column Property Modifiers****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a column-type or brace-type line object.

**Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The Area modifier for the specified column. This item is used for analysis only, not design.

**Field: As2**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The As2 modifier for the specified column. This item is used for analysis only, not design.

**Field: As3**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The As3 modifier for the specified column. This item is used for analysis only, not design.

**Field: J**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The J modifier for the specified column. This item is used for analysis only, not design.

**Field: I22**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The I22 modifier for the specified column. This item is used for analysis only, not design.

**Field: I33**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The I33 modifier for the specified column. This item is used for analysis only, not design.

**Field: Weight**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The Weight multiplier for the specified column. This item is used for analysis only, not design.

**Table: Coordinate Systems****Field: CoordSys**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of a coordinate system.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Cartesian, Cylindrical or General indicating the coordinate system type.

**Field: OriginGx**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the coordinate system origin.

**Field: OriginGy**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the coordinate system origin.

**Field: RotAngle**

Field is Imported: Yes  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The rotation angle of the coordinate system in degrees about the global Z axis. When the positive global Z axis points toward you counterclockwise rotations are positive.

**Table: Cracking Analysis Reinforcement****Field: ReinfOpt**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either User, FE Design or Quick indicating the source of the reinforcement assumed for cracking analysis. FE Design is short for finite element based design.

**Field: TopBar**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the user specified top reinforcement bar assumed for cracking analysis. This item only applies when the ReinfOpt item is User.

**Field: TopSpace**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The spacing of the user specified top reinforcement bar assumed for cracking analysis. This item only applies when the ReinfOpt item is User.

**Field: BotBar**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the user specified bottom reinforcement bar assumed for cracking analysis. This item only applies when the ReinfOpt item is User.

**Field: BotSpace**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The spacing of the user specified bottom reinforcement bar assumed for cracking analysis. This item only applies when the ReinfOpt item is User.

**Field: MinReinfT**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The minimum tension reinforcement ratio used for cracking analysis. The tension reinforcement assumed in the cracking analysis will never be less than the amount specified here.

**Field: MinReinfC**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The minimum compression reinforcement ratio used for cracking analysis. The compression reinforcement assumed in the cracking analysis will never be less than the amount specified here.

**Field: UserModRup**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if the cracking modulus of rupture is user specified. It is No if the program default modulus of rupture is used.

**Field: ModRup**

Field is Imported: Yes

Format: Stress Input (Stresses section of form)

Units: Force/Length<sup>2</sup>

The user specified cracking modulus of rupture. This item only applies when the UserModRup item is Yes.

**Table: Design Preferences 01 - Resistance Factors****Field: PhiTen**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The resistance factor Phi (tension controlled).

**Field: PhiComp**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The resistance factor Phi (compression controlled).

**Field: PhiBend**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The resistance factor Phi (bending).

**Field: PhiShear**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The resistance factor Phi (shear).

**Field: PhiSteel**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The resistance factor Phi (steel).

**Field: PhiConc**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The resistance factor Phi (concrete).

**Field: Country**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either CEN, Denmark, Finland, Norway, Singapore, Slovenia, Sweden or UK indicating the country considered.

**Field: ComboSet**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either 'Eq. 6.10' or 'Max Eq. 6.10a/6.10b' indicating the load combination set considered.

**Field: ReliabilityClass**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Reliability class which defines a scale factor for load combinations. This is currently only used for Denmark, Finland, and Sweden.

**Field: Theta**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The factor theta.

**Field: GammaSteel**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The resistance factor Gamma Steel.

**Field: GammaConc**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The resistance factor Gamma Concrete.

**Field: GammaShear**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The resistance factor Gamma Shear.

**Field: Gamma0**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The resistance factor Gamma0.

**Field: AlphaCC**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The factor AlphaCC.

**Field: AlphaCT**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The factor AlphaCT.

**Field: AlphaCCLW**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The factor AlphaCC (Lightweight).

**Field: AlphaCTLW**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The factor AlphaCT (Lightweight).

**Field: RebarClassAS09**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either 'Class N' or 'Class L' indicating the Reinforcement Ductility Class.

**Field: SlabAsMinAS09**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Two-way Slab Minimum Reinforcement Criteria.

**Table: Design Preferences 02 - Rebar Cover - Slabs****Field: CoverTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The clear cover for the top non-prestressed reinforcement.

**Field: CoverBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The clear cover for the bottom non-prestressed reinforcement.

**Field: BarSize**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the reinforcement bar that is the preferred rebar for non-prestressed reinforcement.

**Field: InnerLayer**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either A or B indicating the design strip layer that represents the inner slab rebar layer.

**Field: PTCGSTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The top CGS of the tendon.

**Field: PTCGSBotExt**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The bottom CGS of the tendon in exterior bays.

**Field: PTCGSBotInt**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The bottom CGS of the tendon in interior bays.

**Field: SlabType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either One Way or Two Way indicating the slab type assumed when calculating the required minimum reinforcing for the slab.

**Table: Design Preferences 03 - Rebar Cover - Beams****Field: CoverTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The clear cover for the top non-prestressed reinforcement.

**Field: CoverBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The clear cover for the bottom non-prestressed reinforcement.

**Field: BarSizeF**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the reinforcement bar that is the preferred rebar for non-prestressed flexural reinforcement.

**Field: BarSizeS**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the reinforcement bar that is the preferred rebar for non-prestressed shear reinforcement.

**Field: PTCGSTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The top CGS of the tendon.

**Field: PTCGSBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The bottom CGS of the tendon.

**Table: Design Preferences 04 - Prestress Data****Field: UserStress**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

Indicates if the allowable PT stresses are user defined.

**Field: InitConcRat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The concrete strength ratio at transfer used when calculating initial stresses.

**Field: InitTopTen**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The top fiber tensile stress ratio used when calculating initial stresses.

**Field: InitBotTen**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The bottom fiber tensile stress ratio used when calculating initial stresses.

**Field: InitExComp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The extreme fiber compressive stress ratio used when calculating initial stresses.

**Field: FinTopTen**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The top fiber tensile stress ratio used when calculating final stresses.

**Field: FinBotTen**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The bottom fiber tensile stress ratio used when calculating final stresses.

**Field: FinExComp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The extreme fiber compressive stress ratio used when calculating final stresses.

**Field: SusExComp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The extreme fiber compressive stress ratio used when calculating sustained stresses.

**Field: LLFraction**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The fraction of live load considered used when calculating sustained stresses.

**Table: Function - Response Spectrum****Field: Func**

Field is Imported: Yes

Format: Controlled by program

Units: Text

the name of a response spectrum function.

**Field: Period**

Field is Imported: Yes

Format: Period (Time-Related section of form)

Units: Sec

The response spectrum function period value.

**Field: Accel**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The response spectrum function acceleration value. Note that this item is unitless. The acceleration units are in the scale factor that is specified for the function when defining the response spectrum load case.

**Field: FuncDamp**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The damping ratio (fraction of critical damping) associated with the response spectrum function.

**Table: Grid Lines****Field: CoordSys**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of the coordinate system for which the grid lines are defined.

**Field: AxisDir**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either X, R, Y, T or General indicating the axis direction used to locate the grid line. X, Y and General only apply to Cartesian coordinate systems. R and T only apply to Cylindrical coordinate systems.

**Field: GridID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the grid line.

**Field: Ordinate**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

Location of the grid line along the axis specified by the AxisDir item when the AxisDir item is X, Y or R.

**Field: TAngle**

Field is Imported: Yes  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

Location (angle) of the grid line when the AxisDir item is T.

**Field: X1**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The X coordinate of end point 1 on the grid line in the specified coordinate system. This item applies when the AxisDir item is General.

**Field: Y1**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The Y coordinate of end point 1 on the grid line in the specified coordinate system. This item applies when the AxisDir item is General.

**Field: X2**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The X coordinate of end point 2 on the grid line in the specified coordinate system. This item applies when the AxisDir item is General.

**Field: Y2**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The Y coordinate of end point 2 on the grid line in the specified coordinate system. This item applies when the AxisDir item is General.

**Field: Visible**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if the grid line is visible. Otherwise it is No.

**Field: BubbleLoc**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Start or End indicating that the grid line bubble occurs at the start or the end of the grid line.

**Field: GridColor**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either a defined color or an integer representation of the color associated with the grid line.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: BubbleSize**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The diameter of the grid line bubble.

**Field: HideAll**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if the all grid lines for the specified coordinate system are hidden. Otherwise it is No.

**Table: Group Assignments****Field: Group**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a group.

**Field: ObjType**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Point, Line, Area, Tendon or Strip indicating the object type.

**Field: ObjLabel**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Label of an object that is part of the specified group.

**Table: Group Definitions****Field: Group**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a group.

**Field: Color**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either a defined color or an integer representation of the color associated with the group.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes

Format: Controlled by program

Units: Text

User notes for the specified group.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified group.

**Table: Line Spring Assignments****Field: Line**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a line object.

**Field: Spring**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either None or the name of a defined line spring property.

**Table: Load Assignments - Line Objects - Distributed Loads****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: LoadPat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the load pattern to which the load is applied.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Force or Moment indicating the load type (force per unit length or moment per unit length).

**Field: Dir**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Local 1, Local 2, Local 3, Global X, Global Y or Gravity indicating the load direction.

**Field: DistType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either RelDist or AbsDist. It indicates which of the distance fields (RelDist or AbsDist) will be read on import.

**Field: RelDistA**

Field is Imported: Yes  
Format: Relative Distance (Structure Dimensions section of form)  
Units: Unitless

The specified relative distance from the I-end of the line object to the starting point of the load segment considered. The relative distance is equal to the absolute distance divided by the line object length.

**Field: RelDistB**

Field is Imported: Yes

Format: Relative Distance (Structure Dimensions section of form)

Units: Unitless

The specified relative distance from the I-end of the line object to the ending point of the load segment considered. The relative distance is equal to the absolute distance divided by the line object length.

**Field: AbsDistA**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The specified absolute distance from the I-end of the line object to the starting point of the load segment considered.

**Field: AbsDistB**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The specified absolute distance from the I-end of the line object to the ending point of the load segment considered.

**Field: FOverLA**

Field is Imported: Yes

Format: Force/Length (Forces section of form)

Units: Force/Length

The force per unit length in the specified load direction at the starting point of the load segment considered. This item only applies when the Type item is Force.

**Field: FOverLB**

Field is Imported: Yes

Format: Force/Length (Forces section of form)

Units: Force/Length

The force per unit length in the specified load direction at the ending point of the load segment considered. This item only applies when the Type item is Force.

**Field: MOverLA**

Field is Imported: Yes

Format: Moment/Length (Forces section of form)

Units: Force-Length/Length

The moment per unit length in the specified load direction at the starting point of the load segment considered. This item only applies when the Type item is Moment.

**Field: MOverLB**

Field is Imported: Yes

Format: Moment/Length (Forces section of form)

Units: Force-Length/Length

The moment per unit length in the specified load direction at the ending point of the load segment considered. This item only applies when the Type item is Moment.

**Table: Load Assignments - Line Objects - Point Loads****Field: Line**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a line object.

**Field: LoadPat**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the load pattern to which the load is applied.

**Field: Type**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Force or Moment indicating the load type.

**Field: Dir**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Local 1, Local 2, Local 3, Global X, Global Y or Gravity indicating the load direction.

**Field: DistType**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either RelDist or AbsDist. It indicates which of the distance fields (RelDist or AbsDist) will be read on import.

**Field: RelDist**

Field is Imported: Yes

Format: Relative Distance (Structure Dimensions section of form)

Units: Unitless

The specified relative distance from the I-end of the line object to the load location. The relative distance is equal to the absolute distance divided by the line object length.

**Field: AbsDist**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The specified relative distance from the I-end of the line object to the load location. The relative distance is equal to the absolute distance divided by the line object length.

**Field: Force**

Field is Imported: Yes

Format: Force (Forces section of form)

Units: Force

The point force applied in the specified load direction at the specified location along the line object. This item only applies when the Type item is Force.

**Field: Moment**

Field is Imported: Yes

Format: Moment (Forces section of form)

Units: Force-Length

The point moment applied about the specified load direction at the specified location along the line object. This item only applies when the Type item is Moment.

**Table: Load Assignments - Point Displacement Loads****Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a point object.

**Field: LoadPat**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the load pattern to which the load is applied.

**Field: Ux**

Field is Imported: Yes

Format: Translational Displ (Displacements section of form)

Units: Length

The applied ground translational displacement in the global X direction.

**Field: Uy**

Field is Imported: Yes

Format: Translational Displ (Displacements section of form)

Units: Length

The applied ground translational displacement in the global Y direction.

**Field: Ugrav**

Field is Imported: Yes

Format: Translational Displ (Displacements section of form)

Units: Length

The applied ground translational displacement in the gravity (negative global Z) direction.

**Field: Rx**

Field is Imported: Yes

Format: Rotational Displ (Displacements section of form)

Units: Radians

The applied ground rotational displacement about the global X axis.

**Field: Ry**

Field is Imported: Yes

Format: Rotational Displ (Displacements section of form)

Units: Radians

The applied ground rotational displacement about the global Y axis.

**Field: Rz**

Field is Imported: Yes

Format: Rotational Displ (Displacements section of form)

Units: Radians

The applied ground rotational displacement about the global Z axis.

**Table: Load Assignments - Point Loads****Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a point object.

**Field: LoadPat**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the load pattern to which the load is applied.

**Field: Fx**

Field is Imported: Yes

Format: Force (Forces section of form)

Units: Force

The applied force in the global X direction.

**Field: Fy**

Field is Imported: Yes

Format: Force (Forces section of form)

Units: Force

The applied force in the global Y direction.

**Field: Fgrav**

Field is Imported: Yes

Format: Force (Forces section of form)

Units: Force

The applied force in the gravity (negative global Z) direction.

**Field: Mx**

Field is Imported: Yes

Format: Moment (Forces section of form)

Units: Force-Length

The applied moment about the global X axis.

**Field: My**

Field is Imported: Yes  
Format: Moment (Forces section of form)  
Units: Force-Length

The applied moment about the global Y axis.

**Field: Mz**

Field is Imported: Yes  
Format: Moment (Forces section of form)  
Units: Force-Length

The applied moment about the global Z axis.

**Field: XDim**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The global X dimension of the load used for punching shear.

**Field: YDim**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The global Y dimension of the load used for punching shear.

**Table: Load Assignments - Slab Temperature Loads****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: LoadPat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of the load pattern to which the load is applied.

**Field: TopTemp**

Field is Imported: Yes

Format: Temperature Change (Forces section of form)

Units: Temp

The temperature change at the top of the slab.

**Field: BotTemp**

Field is Imported: Yes

Format: Temperature Change (Forces section of form)

Units: Temp

The temperature change at the bottom of the slab.

**Table: Load Assignments - Surface Loads****Field: Area**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of an area object.

**Field: LoadPat**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the load pattern to which the load is applied.

**Field: Dir**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Local 1, Local 2, Local 3, Global X, Global Y or Gravity indicating the load direction.

**Field: UnifLoad**

Field is Imported: Yes

Format: Force/Area (Forces section of form)

Units: Force/Length<sup>2</sup>

The uniform surface load value. Positive loads are in the gravity (negative global Z) direction.

**Field: A**

Field is Imported: Yes

Format: Weight/Volume (Mass and Weight section of form)

Units: Force/Length<sup>3</sup>

A coefficient used to define a nonuniform surface load. For a nonuniform load the loading value at any point,  $w(x, y)$ , is calculated as  $w(x, y) = Ax + By + C$  where A, B and C are user specified coefficients and x and Y are the coordinates of the considered point in the coordinate system specified by the CoordSys item.

**Field: B**

Field is Imported: Yes

Format: Weight/Volume (Mass and Weight section of form)

Units: Force/Length<sup>3</sup>

A coefficient used to define a nonuniform surface load. For a nonuniform load the loading value at any point,  $w(x, y)$ , is calculated as  $w(x, y) = Ax + By + C$  where A, B and C are user specified coefficients and x and Y are the coordinates of the considered point in the coordinate system specified by the CoordSys item.

**Field: C**

Field is Imported: Yes

Format: Force/Area (Forces section of form)

Units: Force/Length<sup>2</sup>

A coefficient used to define a nonuniform surface load. For a nonuniform load the loading value at any point,  $w(x, y)$ , is calculated as  $w(x, y) = Ax + By + C$  where A, B and C are user specified coefficients and x and Y are the coordinates of the considered point in the coordinate system specified by the CoordSys item.

**Table: Load Assignments - Tendon Loads****Field: Tendon**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a tendon object.

**Field: LoadTrans**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the load pattern to which the tendon jacking stress plus short term losses are applied.

**Field: LoadFinal**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The name of the load pattern to which the tendon jacking stress plus short and long term losses are applied.

**Field: JackLoc**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

This is either Start, End or Both indicating the tendon jacking location.

**Field: JackStress**

Field is Imported: Yes  
 Format: Stress Input (Stresses section of form)  
 Units: Force/Length<sup>2</sup>

The tendon jacking stress.

**Table: Load Assignments - Tendon Losses****Field: Tendon**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a tendon object.

**Field: LossType**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

This is either Percent, Fixed or Detailed indicating how the tendon losses are specified.

**Field: LossPcentSt**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Percent

The stressing losses in percent. This item only applies when the LossType item is Percent.

**Field: LossPcentLT**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The long term losses in percent. This item only applies when the LossType item is Percent.

**Field: LossFixedSt**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The fixed stressing losses specified as a stress. This item only applies when the LossType item is Fixed.

**Field: LossFixedLT**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The long term losses specified as a stress. This item only applies when the LossType item is Fixed.

**Field: WobbleLoss**

Field is Imported: Yes  
Format: 1/Length (Miscellaneous section of form)  
Units: 1/Length

The wobble coefficient used to calculate friction losses. This item only applies when the LossType item is Detailed.

**Field: CurveLoss**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The curvature coefficient used to calculate friction losses. This item only applies when the LossType item is Detailed.

**Field: ShortLoss**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The elastic shortening loss specified as a stress. This item only applies when the LossType item is Detailed.

**Field: AnchorSlip**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The anchorage slip distance. This item only applies when the LossType item is Detailed.

**Field: CreepLoss**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The creep loss specified as a stress. This item only applies when the LossType item is Detailed.

**Field: ShrinkLoss**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The concrete shrinkage loss specified as a stress. This item only applies when the LossType item is Detailed.

**Field: RelaxLoss**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The rebar relaxation loss specified as a stress. This item only applies when the LossType item is Detailed.

**Table: Load Cases 01 - General****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is one of the following load case types: LinStatic, NonStatic, LinMSStat, LinModal, Hyperstatic, LinRespSpec.

Note that LinMSStat and Hyperstatic are automatically created by the program and should not be deleted or added in the tables. Also, LinRespSpec are imported from ETABS and should not be deleted or added in the tables.

**Field: DesignOpt**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The is either Auto or User indicating whether the design type for this load case is automatically determined by the program or is user specified.

**Field: DesignType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is one of the following design types: DEAD, SUPER DEAD, LIVE, REDUCIBLE LIVE, PATTERN LIVE, QUAKE, WIND, SNOW, OTHER, PRESTRESS-FINAL, HYPERSTATIC, TEMPERATURE.

This item is only imported when the DesignOpt item is User.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified load case.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified load case.

**Table: Load Cases 02 - Static****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: InitialCond**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Zero or the name of a Nonlinear Static load case. Zero means that the stiffness used is based on the unstressed state. Otherwise, the stiffness used is that at the end of the specified Nonlinear Static load case.

**Field: AType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Linear, Allow Uplift, Cracked, or Long Term Cracked indicating the analysis type for the static load case. The last 3 types are all nonlinear cases.

**Field: RelForceTol**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The relative force tolerance for convergence of nonlinear uplift cases. This item applies to all nonlinear cases.

**Field: CreepCoeff**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The creep coefficient. This item only applies when AType is Long Term Cracked.

**Field: ShrinkStrn**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The shrinkage strain. This item only applies when AType is Long Term Cracked.

**Table: Load Cases 03 - Multistep Static****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: InitialCond**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Zero or the name of a Nonlinear Static load case. Zero means that the stiffness used is based on the unstressed state. Otherwise, the stiffness used is that at the end of the specified Nonlinear Static load case.

**Field: ResType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Envelope, Range or CQC indicating the result type.

**Table: Load Cases 04 - Modal****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: InitialCond**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Zero or the name of a Nonlinear Static load case. Zero means that the stiffness used is based on the unstressed state. Otherwise, the stiffness used is that at the end of the specified Nonlinear Static load case.

**Field: ModeType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Eigen or Ritz indicating the modal analysis type. If the modal case was imported from ETABS then this is reported as External.

**Field: MaxModes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The maximum number of modes to be found.

**Field: MinModes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The minimum number of modes to be found.

**Table: Load Cases 05 - Hyperstatic****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: LinCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The linear static base load case.

**Field: SuppType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The hyperstatic support condition.

**Field: SpringSF**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The relative scale factor for the distributed springs when the hyperstatic support type is Springs.

**Field: RestType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The hyperstatic restraint type.

**Field: RestPt1**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The first user specified point object with hyperstatic restraints.

**Field: RestPt2**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The second user specified point object with hyperstatic restraints.

**Field: RestPt3**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The third user specified point object with hyperstatic restraints.

**Table: Load Cases 06 - Loads Applied****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: LoadPat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of a load pattern.

**Field: SF**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The scale factor for the specified load pattern.

**Table: Load Cases 07 - Response Spectrum - General****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: ModalCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The modal load case used for the specified response spectrum case.

**Field: ModalComb**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The modal combination method. This is either CQC, SRSS, ABS, or GMC.

**Field: GMCf1**

Field is Imported: Yes  
Format: Frequency (Time-Related section of form)  
Units: Cyc/sec

GMCf1 and GMCf2 are frequencies that define the rigid-response content of the ground motion when the GMC modal combination method is used.

**Field: GMCf2**

Field is Imported: Yes  
Format: Frequency (Time-Related section of form)  
Units: Cyc/sec

GMCf1 and GMCf2 are frequencies that define the rigid-response content of the ground motion when the GMC modal combination method is used.

**Field: DirComb**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The directional combination method. This is either SRSS, ABS, or Modified SRSS.

**Field: ABSSF**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The scale factor used for the ABS directional combination method.

**Field: ConstDamp**

Field is Imported: Yes  
Format: Damping Ratios (Damping Items section of form)  
Units: Unitless

The constant modal damping (as a fraction of critical damping,  $0.05 = 5\%$ ) applied to all modes.

**Field: EccenCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either None or the name of a load case which applies the torsional (eccentricity) loading for the response spectrum case.

**Table: Load Cases 08 - Response Spectrum - Loads Applied****Field: LoadCase**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load case.

**Field: LoadName**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either U1 Accel, U2 Accel, or UZ Accel.

**Field: Function**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The name of a function that defines the response spectrum curve used for the specified acceleration.

**Field: Angle**

Field is Imported: Yes  
 Format: Angles (Structure Dimensions section of form)  
 Units: Degrees

The angle between the response spectrum local 1 axis and the positive Global X-axis. Positive angles are measured counterclockwise from the positive Global X-axis to the response spectrum local 1 axis. This item does not apply for UZ accelerations.

**Field: TransAccSF**

Field is Imported: Yes  
 Format: Acceleration-Trans (Time-Related section of form)  
 Units: Length/sec<sup>2</sup>

A scale factor multiplying the translational acceleration values of the associated response spectrum function.

**Table: Load Cases 09 - External Mode Data****Field: LoadCase**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a load case.

**Field: DampElm**

Field is Imported: Yes  
 Format: Damping Ratios (Damping Items section of form)  
 Units: Unitless

Modal damping due to the effective damping in link elements only.

**Field: DampCModal**

Field is Imported: Yes  
 Format: Damping Ratios (Damping Items section of form)  
 Units: Unitless

Composite modal damping.

**Field: MissMass**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the considered mode is a missing mass mode. Otherwise it is No.

**Field: ModalMass**

Field is Imported: Yes  
Format: Modal Mass (Modal Factors section of form)  
Units: Force-Length-s2

The modal mass for the specified mode. This is a measure of the kinetic energy in the structure if it is deforming in the specified mode. Modal mass is calculated as  $S(\text{transpose}) * M * S$  where  $S$  is the mode shape and  $M$  is the mass matrix.

Note that the modal period (MP), modal mass (MM) and modal stiffness (MS) are related to each other by the following equation:

$$MP = 2 * \pi * (MM/MS)^{0.5}.$$

**Field: ModalStiff**

Field is Imported: Yes  
Format: Modal Stiffness (Modal Factors section of form)  
Units: Force-Length

Modal stiffness for the specified mode. This is a measure of the strain energy in the structure if it is deforming in the specified mode. Modal mass is calculated as  $S(\text{transpose}) * K * S$  where  $S$  is the mode shape and  $K$  is the stiffness matrix.

Note that the modal period (MP), modal mass (MM) and modal stiffness (MS) are related to each other by the following equation:

$$MP = 2 * \pi * (MM/MS)^{0.5}.$$

**Field: PFUX**

Field is Imported: Yes  
Format: Modal Par - Trans (Modal Factors section of form)  
Units: Force-s2

The modal participation factor for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: PFUY**

Field is Imported: Yes

Format: Modal Par - Trans (Modal Factors section of form)

Units: Force-s2

The modal participation factor for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: PFUZ**

Field is Imported: Yes

Format: Modal Par - Trans (Modal Factors section of form)

Units: Force-s2

The modal participation factor for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: PFRX**

Field is Imported: Yes

Format: Modal Par - Rot (Modal Factors section of form)

Units: Force-Length-s2

The modal participation factor for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: PFRY**

Field is Imported: Yes

Format: Modal Par - Rot (Modal Factors section of form)

Units: Force-Length-s2

The modal participation factor for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: PFRZ**

Field is Imported: Yes

Format: Modal Par - Rot (Modal Factors section of form)

Units: Force-Length-s2

The modal participation factor for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: SRUX**

Field is Imported: Yes

Format: Controlled by program

Units: Percent

The static load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: SRUY**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The static load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: SRUZ**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The static load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: SRRX**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The static load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: SRRY**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The static load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: SRRZ**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The static load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: DRUX**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The dynamic load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: DRUY**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The dynamic load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: DRUZ**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The dynamic load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: DRRX**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The dynamic load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: DRRY**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The dynamic load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Field: DRRZ**

Field is Imported: Yes  
Format: Controlled by program  
Units: Percent

The dynamic load participation ratio for the specified structure global degree of freedom, for the associated mode of the associated modal load case.

**Table: Load Combinations****Field: Combo**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a load combination.

**Field: Load**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of a load case or load combination that is part of the specified load combination.

**Field: SF**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

the scale factor for the specified load.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is one of the following load combination types types: Linear Add, Envelope, Absolute Add, SRSS, Range Add,.

**Field: DSStrength**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the Combo is used for ultimate strength design; otherwise it is No.

**Field: DSServInit**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the Combo is used for initial service load design; otherwise it is No.

**Field: DSServNorm**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the Combo is used for normal service load design; otherwise it is No.

**Field: DSServLong**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the Combo is used for long term service load design; otherwise it is No.

**Field: AutoDesign**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the combination is an automatic design combination; otherwise it is No.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified load combination.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified load combination.

**Table: Load Patterns****Field: LoadPat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of a load pattern.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is one of the following load pattern types: DEAD, SUPER DEAD, LIVE, REDUCIBLE LIVE, PATTERN LIVE, AUTO PATTERN LIVE, QUAKE, WIND, SNOW, OTHER, PRESTRESS-FINAL, PRESTRESS-TRANSFER, TEMPERATURE.

**Field: SelfWtMult**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The self weight multiplier for the load pattern.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified load pattern.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified load pattern.

**Table: Mass Source****Field: LoadPat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

A load pattern used to define the mass.

**Field: Multiplier**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Multiplier for the load pattern specified in the LoadPat item.

**Table: Material Properties 01 - General****Field: Material**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a material property.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Steel, Concrete, Other, Rebar or Tendon indicating the type of the material.

**Field: Color**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either a defined color or an integer representation of the color associated with the material property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified material property.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified material property.

**Table: Material Properties 02 - Steel****Field: Material**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a Steel material property.

**Field: E**

Field is Imported: Yes

Format: Stress Input (Stresses section of form)

Units: Force/Length<sup>2</sup>

The modulus of elasticity.

**Field: U**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

Poisson's ratio.

**Field: A**

Field is Imported: Yes

Format: Thermal Coefficient (Miscellaneous section of form)

Units: 1/Temp

The coefficient of thermal expansion.

**Field: UnitWt**

Field is Imported: Yes

Format: Weight/Volume (Mass and Weight section of form)

Units: Force/Length<sup>3</sup>

The material weight per unit volume.

**Field: Fy**

Field is Imported: Yes

Format: Stress Input (Stresses section of form)

Units: Force/Length<sup>2</sup>

Yield stress of the material.

**Field: Fu**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

Tensile strength of the material.

**Table: Material Properties 03 - Concrete****Field: Material**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a Concrete material property.

**Field: E**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The modulus of elasticity.

**Field: U**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

Poisson's ratio.

**Field: A**

Field is Imported: Yes  
Format: Thermal Coefficient (Miscellaneous section of form)  
Units: 1/Temp

The coefficient of thermal expansion.

**Field: UnitWt**

Field is Imported: Yes  
Format: Weight/Volume (Mass and Weight section of form)  
Units: Force/Length<sup>3</sup>

The material weight per unit volume.

**Field: Fc**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

Compressive strength of the material.

**Field: LtWtConc**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the material is lightweight concrete; otherwise it is No.

**Field: LtWtFact**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The shear strength reduction factor for lightweight concrete.

**Table: Material Properties 04 - Rebar****Field: Material**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a Rebar material property.

**Field: E**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The modulus of elasticity.

**Field: UnitWt**

Field is Imported: Yes  
Format: Weight/Volume (Mass and Weight section of form)  
Units: Force/Length<sup>3</sup>

The material weight per unit volume.

**Field: Fy**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length2

Yield stress of the material.

**Field: Fu**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length2

Tensile strength of the material.

**Table: Material Properties 05 - Tendon****Field: Material**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a Tendon material property.

**Field: E**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length2

The modulus of elasticity.

**Field: UnitWt**

Field is Imported: Yes  
Format: Weight/Volume (Mass and Weight section of form)  
Units: Force/Length3

The material weight per unit volume.

**Field: Fy**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length2

Yield stress of the material.

**Field: Fu**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

Tensile strength of the material.

**Table: Material Properties 06 - Other****Field: Material**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a Other material property.

**Field: E**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The modulus of elasticity.

**Field: U**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

Poisson's ratio.

**Field: A**

Field is Imported: Yes  
Format: Thermal Coefficient (Miscellaneous section of form)  
Units: 1/Temp

The coefficient of thermal expansion.

**Field: UnitWt**

Field is Imported: Yes  
Format: Weight/Volume (Mass and Weight section of form)  
Units: Force/Length<sup>3</sup>

The material weight per unit volume.

**Table: Object Geometry - Areas 01 - General****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: NumPoints**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The number of corner points in the area object.

**Field: Point1**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Use the Point1, Point2, Point3 and Point4 fields to list the point objects defining the area object in order either counter-clockwise or clockwise around the object. If the area object has more than four points then use multiple records to list all of the points. Be sure the area object label is entered for each record associated with the object.

**Field: Point2**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Use the Point1, Point2, Point3 and Point4 fields to list the point objects defining the area object in order either counter-clockwise or clockwise around the object. If the area object has more than four points then use multiple records to list all of the points. Be sure the area object label is entered for each record associated with the object.

**Field: Point3**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Use the Point1, Point2, Point3 and Point4 fields to list the point objects defining the area object in order either counter-clockwise or clockwise around the object. If the area object has more than four points then use multiple records to list all of the points. Be sure the area object label is entered for each record associated with the object.

**Field: Point4**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Use the Point1, Point2, Point3 and Point4 fields to list the point objects defining the area object in order either counter-clockwise or clockwise around the object. If the area object has more than four points then use multiple records to list all of the points. Be sure the area object label is entered for each record associated with the object.

**Field: Auto**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the area object is an automatically created area object; otherwise it is No.

**Field: TotalArea**

Field is Imported: No  
Format: Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The area of the area object.

**Field: AreaType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Slab, Wall or Ramp indicating the area type.

**Field: CurvedEdges**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The number of curved edges in the area object. This item only applies to slabs. For walls and ramps this item is blank.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified area object.

**Table: Object Geometry - Areas 02 - Curved Slab Edges****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: EdgeNum**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The area object edge number. Edge 1 is from point 1 to point 2, etc.

**Field: CurveType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Circular, Multilinear or Spline indicating the curve type.

**Field: ICPNumber**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The internal control point number.

**Field: GX**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate at the specified internal control point.

**Field: GY**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate at the specified internal control point.

**Field: Tension**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Unitless

The spline curve tension. This item only applies to Spline curves.

**Table: Object Geometry - Areas 03 - Curved Walls****Field: Area**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of an area object.

**Field: CurveType**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

This is either Circular, Multilinear or Spline indicating the curve type.

**Field: ICPNumber**

Field is Imported: No  
 Format: Controlled by program  
 Units: Unitless

The internal control point number.

**Field: GX**

Field is Imported: Yes  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The global X coordinate at the specified internal control point.

**Field: GY**

Field is Imported: Yes  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The global Y coordinate at the specified internal control point.

**Field: Tension**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Unitless

The spline curve tension. This item only applies to Spline curves.

**Table: Object Geometry - Areas 04 - Wall Panels****Field: Panel**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of a wall panel object.

**Field: NumPoints**

Field is Imported: No  
 Format: Controlled by program  
 Units: Unitless

The number of corner points in the wall panel object.

**Field: GlobalX1**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The GlobalX1, GlobalX2, GlobalX3 and GlobalX4 fields list the global X coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalY1**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The GlobalY1, GlobalY2, GlobalY3 and GlobalY4 fields list the global Y coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalX2**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The GlobalX1, GlobalX2, GlobalX3 and GlobalX4 fields list the global X coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalY2**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The GlobalY1, GlobalY2, GlobalY3 and GlobalY4 fields list the global Y coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalX3**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The GlobalX1, GlobalX2, GlobalX3 and GlobalX4 fields list the global X coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalY3**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The GlobalY1, GlobalY2, GlobalY3 and GlobalY4 fields list the global Y coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalX4**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The GlobalX1, GlobalX2, GlobalX3 and GlobalX4 fields list the global X coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Field: GlobalY4**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The GlobalY1, GlobalY2, GlobalY3 and GlobalY4 fields list the global Y coordinates of the corner points of the wall panel object in order either counter-clockwise or clockwise around the object. If the wall panel object has more than four corner points then multiple records are used to list all of the corner points.

**Table: Object Geometry - Design Strips****Field: Strip**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of a design strip object.

**Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of a point object along the polyline that defines the strip.

**Field: GlobalX**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the specified point object.

**Field: GlobalY**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the specified point object.

**Field: WLeft**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The strip width left just before the specified point.

**Field: WBRight**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The strip width right just before the specified point.

**Field: WALeft**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The strip width left just after the specified point.

**Field: WARight**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The strip width right just after the specified point.

**Field: AutoWiden**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

**Table: Object Geometry - Dimension Lines****Field: AlignType**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Parallel, Horizontal or Vertical indicating the dimension line alignment type.

**Field: GlobalX1**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the first drawn base point of the dimension line.

**Field: GlobalY1**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the first drawn base point of the dimension line.

**Field: GlobalX2**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the second drawn base point of the dimension line.

**Field: GlobalY2**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the second drawn base point of the dimension line.

**Field: GlobalX3**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the start point of the displayed dimension line.

**Field: GlobalY3**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the start point of the displayed dimension line.

**Field: GlobalX4**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the end point of the displayed dimension line.

**Field: GlobalY4**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the end point of the displayed dimension line.

**Field: Length**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The length of the dimension line.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified dimension line.

**Table: Object Geometry - Lines 01 - General****Field: Line**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a line object.

**Field: PointI**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the point object at the I-end of the line object.

**Field: PointJ**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of the point object at the J-end of the line object.

**Field: LineType**

Field is Imported: No

Format: Controlled by program

Units: Text

This is either Beam, Column or Brace indicating the line type.

**Field: CurveType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

For beams this is either Straight, Circular, Multilinear or Spline indicating the curve type. This item only applies to slabs. For columns and braces this item is blank because those objects can not be curved.

**Field: Length**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The length of the line object.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified line object.

**Table: Object Geometry - Lines 02 - Curved Beams****Field: Line**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: CurveType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Circular, Multilinear or Spline indicating the curve type.

**Field: ICPNumber**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The internal control point number.

**Field: GX**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate at the specified internal control point.

**Field: GY**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate at the specified internal control point.

**Field: Tension**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The spline curve tension. This item only applies to Spline curves.

**Table: Object Geometry - Point Coordinates****Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a point object.

**Field: GlobalX**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

Global X coordinate of the specified point object.

**Field: GlobalY**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

Global Y coordinate of the specified point object.

**Field: GlobalZ**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

Global Z coordinate of the specified point object.

Note that this item is not imported when the PointLoc item is At Datum.

**Field: SpecialPt**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

The item is Yes if the specified point is designated as a Special Point. Otherwise it is No.

The significance of a Special point is that it is not automatically deleted by the graphic interface if (or when) no objects are connected to it. If a point is not designated as a special point, then the graphic interface will always delete it if it is not connected to an object.

If a point is created in the graphic interface using either the Draw menu > Draw Point Objects command, or its associated toolbar button, then that point is designated as a Special Point. If a point is automatically created in the graphic interface as a result of drawing another object, then that point is not designated as a Special Point.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified point object.

**Table: Object Geometry - Slab Rebar****Field: SlabRebar**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a slab rebar object.

**Field: GlobalX1**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the start point of the slab rebar definition line.

**Field: GlobalY1**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the start point of the slab rebar definition line.

**Field: GlobalX2**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the end point of the slab rebar definition line.

**Field: GlobalY2**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the end point of the slab rebar definition line.

**Field: OffsetVert**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The vertical offset measured from the model datum to the center of the rebar.

**Field: WidthLeft**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The width to the left of the slab rebar definition line over which rebar is distributed.

**Field: WidthRight**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The width to the right of the slab rebar definition line over which rebar is distributed.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified slab rebar object.

**Table: Object Geometry - Tendons 01 - General****Field: Tendon**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a tendon object.

**Field: NumPoints**

Field is Imported: No

Format: Controlled by program

Units: Unitless

The number of horizontal layout points in the tendon object.

**Field: Point1**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Use the Point1 and Point2 fields to list the point objects (in order) defining the horizontal layout of the tendon object. If the tendon object has more than two points then use multiple records to list all of the points. Be sure the tendon object label is entered for each record associated with the object.

**Field: Point2**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Use the Point1 and Point2 fields to list the point objects (in order) defining the horizontal layout of the tendon object. If the tendon object has more than two points then use multiple records to list all of the points. Be sure the tendon object label is entered for each record associated with the object.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified tendon object.

**Table: Object Geometry - Tendons 02 - Curved Horizontal Layout****Field: Tendon**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a tendon object.

**Field: Segment**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The tendon segment number. Segment 1 is from point 1 to point 2, etc.

**Field: CurveType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Circular, Multilinear or Spline indicating the curve type.

**Field: ICPNumber**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The internal control point number.

**Field: GX**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate at the specified internal control point.

**Field: GY**

Field is Imported: Yes  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate at the specified internal control point.

**Field: Tension**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Unitless

The spline curve tension. This item only applies to Spline curves.

**Table: Object Geometry - Tendons 03 - Vertical Profile****Field: Tendon**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a tendon object.

**Field: SpanLabel**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The tendon span label. On import this item is only used to determine if the first and/or last span is a cantilever. The actual span name is not imported.

**Field: SpanType**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

This is one of the following tendon span types:

Linear,  
 Parabola,  
 Reverse Parabola,  
 Partial Parabola - Left,  
 Partial Parabola - Right,  
 Partial Reverse Parabola - Left,  
 Partial Reverse Parabola - Right,  
 Harped One Point,  
 Harped Two Points,  
 Partial Harp - Left,  
 Partial Harp - Right.

**Field: L**

Field is Imported: Yes  
 Format: Absolute Distance (Structure Dimensions section of form)  
 Units: Length

The span horizontal length.

**Field: A**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The relative horizontal distance from the left end of the span to the left inflection point.  
The relative distance is the actual distance divided by the span length.

**Field: B**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The relative horizontal distance from the right end of the span to the right inflection point.  
The relative distance is the actual distance divided by the span length.

**Field: C**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The relative horizontal distance from the left end of the span to the parabola center point, or the first harp point. The relative distance is the actual distance divided by the span length.

**Field: D**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The relative horizontal distance from the left end of the span to the second harp point.  
The relative distance is the actual distance divided by the span length.

**Field: ZL**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The global Z direction distance from the tendon datum to the span left end.

**Field: ZC**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The global Z direction distance from the tendon datum to the parabola center point, or the first harp point.

**Field: ZD**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The global Z direction distance from the tendon datum to the second harp point.

**Field: ZR**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The global Z direction distance from the tendon datum to the span right end.

**Table: Object Geometry - Tendons 04 - Discretized Points****Field: Tendon**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a tendon object.

**Field: PointNum**

Field is Imported: No

Format: Controlled by program

Units: Text

The point number along the discretized tendon.

**Field: GlobalX**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the specified point along the discretized tendon.

**Field: GlobalY**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the specified point along the discretized tendon.

**Field: GlobalZ**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

.

**Table: Object Geometry - Tendons 05 - Support Points****Field: Tendon**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a tendon object.

**Field: GlobalX**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the specified tendon support point.

**Field: GlobalY**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the specified tendon support point.

**Table: Objects Included In Analysis Mesh 01 - Points****Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a point object.

**Field: Include**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if the object is included in the analysis mesh; otherwise it is No. The default is No.

Note that point objects attached to structural elements (slabs, openings, beams, supports) are always included in the analysis mesh, even if they are specified to be excluded here.

## Table: Objects Included In Analysis Mesh 02 - Lines

### Field: Line

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a line object.

### Field: Include

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if the object is included in the analysis mesh; otherwise it is No. The default is No.

Note that line objects separating beams or walls are always included in the analysis mesh, even if they are specified to be excluded here.

## Table: Point Restraint Assignments

### Field: Point

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a point object.

### Field: Ux

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This Yes if the point has translational restraint in the global X direction; otherwise it is No.

**Field: Uy**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This Yes if the point has translational restraint in the global Y direction; otherwise it is No.

**Field: Uz**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This Yes if the point has translational restraint in the global Z direction; otherwise it is No.

**Field: Rx**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This Yes if the point has rotational restraint about the global X axis; otherwise it is No.

**Field: Ry**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This Yes if the point has rotational restraint about the global Y axis; otherwise it is No.

**Field: Rz**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This Yes if the point has rotational restraint about the global Z axis; otherwise it is No.

**Table: Point Spring Assignments****Field: Point**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of a point object.

**Field: Spring**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either None or the name of a defined point spring property.

**Table: Program Control****Field: ProgramName**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The program name.

**Field: Version**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The program version.

**Field: ProgLevel**

Field is Imported: No

Format: Controlled by program

Units: Text

The program level.

**Field: LicenseNum**

Field is Imported: No

Format: Controlled by program

Units: Text

The program license number.

**Field: CurrUnits**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The current units at the time the tables are created. Possible values for this include:

lb, in, F

lb, ft, F

Kip, in, F

Kip, ft, F

KN, mm, C

KN, m, C

Kgf, mm, C

Kgf, m, C

N, mm, C

N, m, C

Tonf, mm, C

Tonf, m, C

KN, cm, C

Kgf, cm, C

N, cm, C

Tonf, cm, C

For import the letters DEG can be substituted for the degree symbol if desired.

.

**Field: MergeTol**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The auto merge tolerance (length). This is the basic tolerance value in the model. For example, when a point is drawn within this tolerance length of another point, the drawn point is merged into the existing point.

**Field: ModelDatum**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Z elevation at which the slab objects are modeled.

**Field: StHtAbove**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The default story height above the slab.

**Field: StHtBelow**

Field is Imported: Yes

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The default story height below the slab.

**Field: ConcCode**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The design code used for concrete design.

**Table: Project Information****Field: Item**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The project information item.

**Field: Data**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The project information data for the associated item.

**Table: Punching Shear Design Overwrites 01 - General****Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of a point object. When the program creates a table only point objects where a punching shear check can possibly be done are output.

**Field: Check**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This item is No if the user specifies no punching shear design is to be done at the specified point. Otherwise it is Program Determined.

**Field: LocType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Auto, Interior, Edge 1, Edge 2, Edge 3, Edge 4, Corner 1, Corner 2, Corner 3, Corner 4 indicating the punching shear location type.

**Field: Perimeter**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Auto or User Perimeter or User Size indicating the punching shear perimeter type. User Size refers to the support/load size.

**Field: UserXDim**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The user specified support/load X dimension. This item only applies when the Perimeter item is User Size.

**Field: UserYDim**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The user specified support/load Y dimension. This item only applies when the Perimeter item is User Size.

**Field: UserAngle**

Field is Imported: Yes  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The counterclockwise angle for the global X axis to the user specified support/load X axis. This item only applies when the Perimeter item is User Size.

**Field: EffDepth**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Auto or User indicating the punching shear perimeter effective depth type.

**Field: UserDepth**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The user specified punching shear perimeter effective depth. This item only applies when the EffDepth item is User.

**Field: Openings**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Auto or User indicating the punching shear openings definition.

**Field: ReinfType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either None, Rebar Ties or Stud Rails indicating the punching shear reinforcement type.

**Field: ReinfPat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Orthogonal or Radial indicating the punching shear reinforcement pattern. This item only applies when the ReinfType item is not None.

**Field: ReinfFy**

Field is Imported: Yes  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The reinforcing yield stress. This item only applies when the ReinfType item is not None.

**Field: ReinfDiam**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The reinforcing effective diameter. This item only applies when the ReinfType item is not None.

**Field: ReinfSpcg**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The reinforcing spacing, that is, the spacing of the studs if stud rails are specified or the spacing of single leg stirrups if rebar ties are specified. This item only applies when the ReinfType item is not None.

**Table: Punching Shear Design Overwrites 02 - User Perimeter****Field: Point**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of a point object. When the program creates a table only point objects where a punching shear check can possibly be done are output.

**Field: PointNum**

Field is Imported: No

Format: Controlled by program

Units: Text

The punching shear perimeter point or segment number.

**Field: X**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The X coordinate of the specified point relative to the specified point object location.

**Field: Y**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The Y coordinate of the specified point relative to the specified point object location.

**Field: Radius**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The radius of the punching shear perimeter at the specified X,Y coordinates.

**Field: IsNull**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the specified segment is Null. Otherwise it is No.

**Table: Punching Shear Design Overwrites 03 - User Openings****Field: Point**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The name of a point object. When the program creates a table only point objects where a punching shear check can possibly be done are output.

**Field: OpenNum**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The punching shear opening number.

**Field: Shape**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Rectangle or Circle indicating the opening shape.

**Field: XOffset**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The X direction offset from specified point object location to the opening center.

**Field: YOffset**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The Y direction offset from specified point object location to the opening center.

**Field: Width**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The width or diameter of the opening.

**Field: Height**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The height of the opening. This item only applies to rectangular openings.

**Field: Angle**

Field is Imported: Yes  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The rotation angle of the opening. A positive angle rotates counterclockwise about the Z axis when looking down on the model. This item only applies to rectangular openings.

**Table: Reinforcing Bar Sizes****Field: RebarID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

ID (name) of a reinforcing bar.

**Field: Area**

Field is Imported: Yes  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

Area of the specified reinforcing bar.

**Field: Diameter**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

Diameter of the specified reinforcing bar.

**Table: Slab Design Overwrites 01 - Strip Based****Field: Strip**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The name of a design strip object.

**Field: Layer**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either A, B or None indicating the layer to which the strip belongs.

**Field: DesignType**

Field is Imported: Yes

Format: Controlled by program

Units: Text

.

**Field: RLLF**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The reduced live load factor. This factor times the specified reducible live load gives the reduced live load.

**Field: Design**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This is Yes if the strip is to be designed; otherwise it is No.

**Field: IgnorePT**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This is Yes if the prestressing tendons in the strip are to be ignored for design; otherwise it is No. This item only applies when the Design item is Yes.

**Field: RebarMat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The rebar material used when designing the strip.

**Field: CoverType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Preferences or User indicating how the cover is determined.

**Field: CoverTop**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the top rebar CGS used when designing the strip. This item only applies when the CoverType item is User.

**Field: CoverBot**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the bottom rebar CGS used when designing the strip. This item only applies when the CoverType item is User.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified strip object.

**Table: Slab Design Overwrites 02 - Finite Element Based****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an slab-type area object.

**Field: RebarMat**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The rebar material used when designing the slab.

**Field: CoverType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Preferences or User indicating how the cover is determined.

**Field: Dir1TopCov**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the direction 1 top rebar CGS used when designing the slab. This item only applies when the CoverType item is User.

**Field: Dir1BotCov**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the direction 1 bottom rebar CGS used when designing the slab. This item only applies when the CoverType item is User.

**Field: Dir2TopCov**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the direction 2 top rebar CGS used when designing the slab. This item only applies when the CoverType item is User.

**Field: Dir2BotCov**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The cover to the direction 2 bottom rebar CGS used when designing the slab. This item only applies when the CoverType item is User.

**Field: RLLF**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Unitless

The reduced live load factor. This factor times the specified reducible live load gives the reduced live load.

**Field: Design**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This is Yes if the slab object is to be designed; otherwise it is No.

**Field: IgnorePT**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This is Yes if the prestressing tendons in the slab object are to be ignored for design; otherwise it is No. This item only applies when the Design item is Yes.

**Table: Slab Edge Releases****Field: Area**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of an slab-type area object.

**Field: Edge**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The area object edge number to which the release is applied.

**Field: Shear**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Yes/No

This item is Yes if a shear release exists at the specified edge; otherwise it is No. The default is No.

**Field: Moment**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if a moment release exists at the specified edge; otherwise it is No. The default is No.

**Table: Slab Line Releases****Field: Line**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a beam-type line object.

**Field: ShearL**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if a shear release exists on the left side of the line object; otherwise it is No. The default is No.

**Field: MomentL**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if a moment release exists on the left side of the line object; otherwise it is No. The default is No.

**Field: ShearR**

Field is Imported: Yes

Format: Controlled by program

Units: Yes/No

This item is Yes if a shear release exists on the right side of the line object; otherwise it is No. The default is No.

**Field: MomentR**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if a moment release exists on the right side of the line object; otherwise it is No. The default is No.

**Table: Slab Local Axes****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an slab-type area object.

**Field: Angle**

Field is Imported: Yes  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle in degrees that the slab local 1 and 2 axes are rotated from their default orientation. Positive angles appear counterclockwise as you look down on the model. The default is zero.

**Table: Slab Properties 01 - General****Field: Slab**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a slab property.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Slab, Drop, Stiff, Waffle, Ribbed, Mat or Footing indicating the slab property type.

**Field: ThickPlate**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

Indicates if the thick plate option is used for the slab property.

**Field: Color**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either a defined color or an integer representation of the color associated with the slab property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified slab property.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified slab property.

**Table: Slab Properties 02 - Solid Slabs****Field: Slab**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a solid slab property.

**Field: Type**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Slab, Drop, Stiff, Mat or Footing indicating the solid slab property type.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The material for the slab property.

**Field: Thickness**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The slab thickness.

**Field: Ortho**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if orthotropic properties are specified for the slab; otherwise it is No.

**Field: EffThk1**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The effective thickness in the slab local 1 direction (bending about the local 2 axis). This item only applies when the Ortho flag is Yes.

**Field: EffThk2**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The effective thickness in the slab local 2 direction (bending about the local 1 axis). This item only applies when the Ortho flag is Yes.

**Field: EffThkTwst**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The effective thickness for slab twisting moments. This item only applies when the Ortho flag is Yes.

**Table: Slab Properties 03 - Ribbed And Waffle Slabs****Field: Slab**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a ribbed or waffle slab property.

**Field: Type**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either Waffle or Ribbed indicating the slab property type.

**Field: MatProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The material for the slab property.

**Field: TotalDepth**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The total depth of the slab system including the ribs.

**Field: SlabThick**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The slab thickness.

**Field: WidthTop**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

The rib width at the top of the rib.

**Field: WidthBot**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

The rib width at the bottom of the rib.

**Field: RibSpace1**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

For ribbed slabs this is the spacing of the ribs. For waffle slabs it is the spacing of the ribs that are parallel to the slab local 1 axis.

**Field: RibSpace2**

Field is Imported: Yes  
 Format: Length (Section Dimensions section of form)  
 Units: Length

The spacing of the ribs that are parallel to the slab local 2 axis. This item only applies to waffle slabs.

**Field: RibDir**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

The item is either 1 or 2 indicating the slab local axis direction for the ribs. This item only applies to ribbed slabs.

**Table: Slab Property Assignments****Field: Area**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Text

Name of an slab-type area object.

**Field: SlabProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either None of the name of a defined slab property.

**Field: OpeningType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either None, Loaded or Unloaded.

**Table: Slab Property Modifiers****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an slab-type area object.

**Field: f11**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The f11 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: f22**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The f22 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: f12**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The f12 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: m11**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The m11 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: m22**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The m22 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: m12**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The m12 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: v13**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The v13 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: v23**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The v23 stiffness modifier for the specified slab. This item is used for analysis only, not design.

**Field: Weight**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The Weight multiplier for the specified slab. This item is used for analysis only, not design.

**Table: Slab Rebar Property Assignments****Field: SlabRebar**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a slab rebar object.

**Field: RebarID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

ID (name) of a reinforcing bar(s) assigned to the slab rebar object.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of the rebar material property.

**Field: BarNumType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either 'Total Bars' or 'Max. Spacing' indicating how the total number of bars is specified.

**Field: TotalBars**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The total number of bars in the slab rebar object. This item is only imported when the BarNumType item is Total Bars.

**Field: MaxSpacing**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The maximum spacing of bars in the slab rebar object. This item is only imported when the BarNumType item is Max. Spacing.

**Table: Slab Rib Locations****Field: Area**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of an slab-type area object.

**Field: GlobalX**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate of the rib reference point for a ribbed or waffle slab.

**Field: GlobalY**

Field is Imported: Yes

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the rib reference point for a ribbed or waffle slab.

**Table: Slab Vertical Offsets****Field: Area**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of an slab-type area object.

**Field: Offset**

Field is Imported: Yes

Format: Length (Section Dimensions section of form)

Units: Length

The global Z direction offset of the slab from the model datum elevation. The default is zero.

**Table: Soil Properties****Field: Soil**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a soil property.

**Field: Subgrade**

Field is Imported: Yes  
Format: Weight/Volume (Mass and Weight section of form)  
Units: Force/Length<sup>3</sup>

The soil subgrade modulus.

**Field: NonlinOpt**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either None (Linear), Tension Only, Compression Only, or Elastoplastic indicating the nonlinear option for the point spring.

**Field: EPCompStiff**

Field is Imported: Yes  
Format: Trans Stiffness/Length (Stiffness section of form)  
Units: Force/Length/Length

The compressive stiffness of the soil spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPCompStgth**

Field is Imported: Yes  
Format: Trans Stiffness/Length (Stiffness section of form)  
Units: Force/Length/Length

The compressive strength of the soil spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPTensStiff**

Field is Imported: Yes  
Format: Trans Stiffness/Length (Stiffness section of form)  
Units: Force/Length/Length

The tensile stiffness of the soil spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPTensStgth**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The tensile strength of the soil spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: Color**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either a defined color or an integer representation of the color associated with the soil property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes

Format: Controlled by program

Units: Text

User notes for the specified soil property.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified soil property.

**Table: Soil Property Assignments****Field: Area**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of an area object.

**Field: SoilProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either None or the name of a defined soil property.

**Table: Spring Properties - Line****Field: Spring**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a line spring property.

**Field: VertStiff**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The vertical translational stiffness of the line spring.

**Field: RotStiff**

Field is Imported: Yes

Format: Rot Stiffness/Length (Stiffness section of form)

Units: Force/rad

The rotational stiffness of the line spring.

**Field: NonlinOpt**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either None (Linear), Tension Only, Compression Only, or Elastoplastic indicating the nonlinear option for the point spring.

**Field: EPCompStiff**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The compressive stiffness of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPCompStgth**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The compressive strength of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPTensStiff**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The tensile stiffness of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPTensStgth**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The tensile strength of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: Color**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either a defined color or an integer representation of the color associated with the line spring property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes

Format: Controlled by program

Units: Text

User notes for the specified line spring property.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified line spring property.

**Table: Spring Properties - Point****Field: Spring**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a point spring property.

**Field: Ux**

Field is Imported: Yes

Format: Translational Stiffness (Stiffness section of form)

Units: Force/Length

The translational stiffness of the point spring in the Global X direction.

**Field: Uy**

Field is Imported: Yes

Format: Translational Stiffness (Stiffness section of form)

Units: Force/Length

The translational stiffness of the point spring in the Global Y direction.

**Field: Uz**

Field is Imported: Yes

Format: Translational Stiffness (Stiffness section of form)

Units: Force/Length

The translational stiffness of the point spring in the Global Z direction.

**Field: Rx**

Field is Imported: Yes

Format: Rotational Stiffness (Stiffness section of form)

Units: Force-Length/rad

The rotational stiffness of the point spring about the Global X axis.

**Field: Ry**

Field is Imported: Yes  
Format: Rotational Stiffness (Stiffness section of form)  
Units: Force-Length/rad

The rotational stiffness of the point spring about the Global Y axis.

**Field: Rz**

Field is Imported: Yes  
Format: Rotational Stiffness (Stiffness section of form)  
Units: Force-Length/rad

The rotational stiffness of the point spring about the Global Z axis.

**Field: NonlinOpt**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either None (Linear), Tension Only, Compression Only, or Elastoplastic indicating the nonlinear option for the point spring.

**Field: EPCompStiff**

Field is Imported: Yes  
Format: Trans Stiffness/Length (Stiffness section of form)  
Units: Force/Length/Length

The compressive stiffness of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPCompStgth**

Field is Imported: Yes  
Format: Trans Stiffness/Length (Stiffness section of form)  
Units: Force/Length/Length

The compressive strength of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPTensStiff**

Field is Imported: Yes  
Format: Trans Stiffness/Length (Stiffness section of form)  
Units: Force/Length/Length

The tensile stiffness of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: EPTensStgth**

Field is Imported: Yes

Format: Trans Stiffness/Length (Stiffness section of form)

Units: Force/Length/Length

The tensile strength of the spring. This item only applies when the NonlinOpt item is Elastoplastic.

**Field: Color**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is either a defined color or an integer representation of the color associated with the uncoupled point spring property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes

Format: Controlled by program

Units: Text

User notes for the specified uncoupled point spring property.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified uncoupled point spring property.

**Table: Tendon Properties****Field: TendonProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of a tendon property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The material for the tendon property.

**Field: StrandArea**

Field is Imported: Yes  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The cross-sectional area of a single strand in the tendon.

**Field: Color**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either a defined color or an integer representation of the color associated with the tendon property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified tendon property.

**Field: GUID**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The global unique identifier (GUID) for the specified tendon property.

**Table: Tendon Property Assignments****Field: Tendon**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a tendon object.

**Field: TendonProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a tendon property.

**Field: NumStrands**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The number of strands in the tendon.

**Field: BondType**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either Unbonded or Bonded indicating the tendon bond type.

**Table: Wall Normal Offsets****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an wall-type or ramp-type area object.

**Field: Offset**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The wall normal offset in the wall local 3-axis direction.

**Table: Wall Openings****Field: Area**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of an wall-type or ramp-type area object.

**Field: Top**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance from the top left corner of the wall panel (connectivity point 4) to the top edge of the opening.

**Field: Left**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance from the top left corner of the wall panel (connectivity point 4) to the left edge of the opening.

**Field: Height**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The height of the opening.

**Field: Width**

Field is Imported: Yes  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The width of the opening.

**Table: Wall Properties****Field: Wall**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

Name of a wall property.

**Field: MatProp**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

The material for the wall property.

**Field: Thickness**

Field is Imported: Yes  
Format: Length (Section Dimensions section of form)  
Units: Length

The wall thickness.

**Field: AutoRigid**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if an rigid zone area over the wall is automatically included for the wall. Otherwise it is No.

**Field: OutOfPlane**

Field is Imported: Yes  
Format: Controlled by program  
Units: Yes/No

This item is Yes if the wall takes out-of-plane moments. Otherwise it is No.

**Field: Color**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

This is either a defined color or an integer representation of the color associated with the wall property.

The possible defined colors are Black, Red, Orange, Yellow, Green, Cyan, Blue, Magenta, White, Dark Red, Dark Yellow, Dark Green, Dark Cyan, Dark Blue, Dark Magenta, Gray1, Gray2, Gray3, Gray4, Gray5, Gray6, Gray7 and Gray8. Gray1 is a light gray and Gray8 is a dark gray.

**Field: Notes**

Field is Imported: Yes  
Format: Controlled by program  
Units: Text

User notes for the specified wall property.

**Field: GUID**

Field is Imported: Yes

Format: Controlled by program

Units: Text

The global unique identifier (GUID) for the specified wall property.

**Table: Wall Property Assignments****Field: Area**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of an wall-type or ramp-type area object.

**Field: WallProp**

Field is Imported: Yes

Format: Controlled by program

Units: Text

This is the name of a defined wall property.

**Table: Wall Property Modifiers****Field: Area**

Field is Imported: Yes

Format: Controlled by program

Units: Text

Name of an wall-type or ramp-type area object.

**Field: f11**

Field is Imported: Yes

Format: Controlled by program

Units: Unitless

The f11 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: f22**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The f22 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: f12**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The f12 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: m11**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The m11 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: m22**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The m22 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: m12**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The m12 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: v13**

Field is Imported: Yes  
Format: Controlled by program  
Units: Unitless

The v13 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: v23**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Unitless

The v23 stiffness modifier for the specified wall. This item is used for analysis only, not design.

**Field: Weight**

Field is Imported: Yes  
 Format: Controlled by program  
 Units: Unitless

The Weight multiplier for the specified wall. This item is used for analysis only, not design.

**Table: Assembled Nodal Masses****Field: Node**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of a node (point element).

**Field: Point**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of a point object.

**Field: Ux**

Field is Imported: No  
 Format: Mass (Mass and Weight section of form)  
 Units: Force-Sec2/Length

Total global X-direction mass applied to the specified node either directly or indirectly.

**Field: Uy**

Field is Imported: No  
 Format: Mass (Mass and Weight section of form)  
 Units: Force-Sec2/Length

Total global Y-direction mass applied to the specified node either directly or indirectly.

**Field: Uz**

Field is Imported: No  
Format: Mass (Mass and Weight section of form)  
Units: Force-Sec2/Length

Total global Z-direction mass applied to the specified node either directly or indirectly.

**Field: Rx**

Field is Imported: No  
Format: Rotational Inertia (Mass and Weight section of form)  
Units: Force-Length-Sec2

Total mass moment of inertia about the global X-axis applied to the specified node.

**Field: Ry**

Field is Imported: No  
Format: Rotational Inertia (Mass and Weight section of form)  
Units: Force-Length-Sec2

Total mass moment of inertia about the global Y-axis applied to the specified node.

**Field: Rz**

Field is Imported: No  
Format: Rotational Inertia (Mass and Weight section of form)  
Units: Force-Length-Sec2

Total mass moment of inertia about the global Z-axis applied to the specified node.

**Table: Element Forces - Beams****Field: Line**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: Station**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance measured from the I-end of the line object to the considered station.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: P**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Axial force in the line local 1 axis direction at the specified station.

**Field: V2**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Shear force in the line local 2 axis direction at the specified station.

**Field: V3**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Shear force in the line local 3 axis direction at the specified station.

**Field: T**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Torsional moment about the line local 1 axis at the specified station.

**Field: M2**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Bending moment about the line local 2 axis at the specified station.

**Field: M3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Bending moment about the line local 3 axis at the specified station.

**Field: StressTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The flexural stress at the top of the beam.

**Field: StressBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The flexural stress at the bottom of the beam.

**Field: StressShr**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The beam shear stress.

**Field: LineElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the associated line element.

**Field: ElemStation**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance measured from the I-end of the line element to the considered station.

**Table: Element Forces - Beams - Enveloping Summary****Field: Line**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: SpanID**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the line object.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Start, Middle or End indicating the location of the output along the specified span. The Start data is in the first quarter of the span, the Middle output is in the middle half of the span, and the End output is in the last quarter of the span.

**Field: OutputItem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This Is either AbsMaxP, AbsMaxV2, AbsMaxV3, AbsMaxT, AbsMaxM2, MaxM3 or MinM3 indicating the output item.

AbsMaxP is the maximum axial force (by absolute value) in the beam local 1 axis direction within the specified location of the specified beam span.

AbsMaxV2 is the maximum shear force (by absolute value) in the beam local 2 axis direction within the specified location of the specified beam span.

AbsMaxV3 is the maximum shear force (by absolute value) in the beam local 3 axis direction within the specified location of the specified beam span.

AbsMaxT is the maximum torsional moment (by absolute value) about the beam local 1 axis direction within the specified location of the specified beam span.

AbsMaxM2 is the maximum bending moment (by absolute value) about the beam local 2 axis direction within the specified location of the specified beam span.

MaxM3 and MinM3 are the maximum and minimum bending moments about the beam local 3 axis direction within the specified location of the specified beam span.

**Field: ValForce**

Field is Imported: No  
 Format: Force (Forces section of form)  
 Units: Force

The value of the force-type output items: AbsMaxP, AbsMaxV2 and AbsMaxV3.

**Field: ValMoment**

Field is Imported: No  
 Format: Moment (Forces section of form)  
 Units: Force-Length

The value of the moment-type output items: AbsMaxT, AbsMaxM2, MaxM3 and MinM3.

**Field: OutputCase**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

## **Table: Element Forces - Beams - Summary**

**Field: Line**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of a line object.

**Field: SpanID**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the line object.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Start, Middle or End indicating the location of the output along the specified span. The Start data is in the first quarter of the span, the Middle output is in the middle half of the span, and the End output is in the last quarter of the span.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: AbsMaxP**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The maximum axial force (by absolute value) in the line (beam) local 1 axis direction within the specified location of the specified beam span.

**Field: AbsMaxV2**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The maximum shear force (by absolute value) in the line (beam) local 2 axis direction within the specified location of the specified beam span.

**Field: AbsMaxV3**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

**Field: AbsMaxT**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The maximum torsional moment (by absolute value) about the line (beam) local 1 within the specified location of the specified beam span.

**Field: AbsMaxM2**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The maximum bending moment (by absolute value) about the line (beam) local 2 within the specified location of the specified beam span.

**Field: MaxM3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The maximum bending moment about the line (beam) local 3 within the specified location of the specified beam span.

**Field: MinM3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The minimum bending moment about the line (beam) local 3 within the specified location of the specified beam span.

**Table: Element Forces - Columns And Braces****Field: Line**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: Station**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The distance measured from the I-end of the line object to the considered station.

**Field: OutputCase**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No

Format: Controlled by program

Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: P**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

Axial force in the line local 1 axis direction at the specified station.

**Field: V2**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

Shear force in the line local 2 axis direction at the specified station.

**Field: V3**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

Shear force in the line local 3 axis direction at the specified station.

**Field: T**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Torsional moment about the line local 1 axis at the specified station.

**Field: M2**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Bending moment about the line local 2 axis at the specified station.

**Field: M3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Bending moment about the line local 3 axis at the specified station.

**Field: LineElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the associated line element.

**Field: ElemStation**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance measured from the I-end of the line element to the considered station.

**Table: Element Forces - Slabs****Field: Area**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: AreaElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the area element for which the results are reported.

**Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the point element (node) at which the results are reported.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: F11**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal F11 membrane direct force per length reported in the area element local coordinate system.

**Field: F22**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal F22 membrane direct force per length reported in the area element local coordinate system.

**Field: F12**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal F12 membrane shear force per length reported in the area element local coordinate system.

**Field: FMax**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The maximum principal membrane force.

**Field: FMin**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The minimum principal membrane force.

**Field: FAngle**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area local 1 axis to the direction of the maximum principal membrane force.

**Field: FVM**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal Von Mises membrane force per length.

**Field: M11**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The area element internal M11 plate bending moment per length reported in the area element local coordinate system.

**Field: M22**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The area element internal M22 plate bending moment per length reported in the area element local coordinate system.

**Field: M12**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The area element internal M12 plate twisting moment per length reported in the area element local coordinate system.

**Field: MMax**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The maximum principal plate moment.

**Field: MMin**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The minimum principal plate moment.

**Field: MAngle**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area local 1 axis to the direction of the maximum principal plate moment.

**Field: V13**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal V13 plate transverse shear force per length reported in the area element local coordinate system.

**Field: V23**

Field is Imported: No  
 Format: Force/Length (Forces section of form)  
 Units: Force/Length

The area element internal V23 plate transverse shear force per length reported in the area element local coordinate system.

**Field: VMax**

Field is Imported: No  
 Format: Force/Length (Forces section of form)  
 Units: Force/Length

The maximum plate transverse shear force. It is equal to the square root of the sum of the squares of V13 and V23.

**Field: VAngle**

Field is Imported: No  
 Format: Angles (Structure Dimensions section of form)  
 Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area local 1 axis to the direction of Vmax.

**Table: Element Forces - Walls And Ramps****Field: Area**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of an area object.

**Field: AreaElem**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of the area element for which the results are reported.

**Field: Node**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of the point element (node) at which the results are reported.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: F11**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal F11 membrane direct force per length reported in the area element local coordinate system.

**Field: F22**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal F22 membrane direct force per length reported in the area element local coordinate system.

**Field: F12**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal F12 membrane shear force per length reported in the area element local coordinate system.

**Field: FMax**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The maximum principal membrane force.

**Field: FMin**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The minimum principal membrane force.

**Field: FAngle**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area local 1 axis to the direction of the maximum principal membrane force.

**Field: FVM**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal Von Mises membrane force per length.

**Field: M11**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The area element internal M11 plate bending moment per length reported in the area element local coordinate system.

**Field: M22**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The area element internal M22 plate bending moment per length reported in the area element local coordinate system.

**Field: M12**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The area element internal M12 plate twisting moment per length reported in the area element local coordinate system.

**Field: MMax**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The maximum principal plate moment.

**Field: MMin**

Field is Imported: No  
Format: Moment/Length (Forces section of form)  
Units: Force-Length/Length

The minimum principal plate moment.

**Field: MAngle**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area local 1 axis to the direction of the maximum principal plate moment.

**Field: V13**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal V13 plate transverse shear force per length reported in the area element local coordinate system.

**Field: V23**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The area element internal V23 plate transverse shear force per length reported in the area element local coordinate system.

**Field: VMax**

Field is Imported: No  
Format: Force/Length (Forces section of form)  
Units: Force/Length

The maximum plate transverse shear force. It is equal to the square root of the sum of the squares of V13 and V23.

**Field: VAngle**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area local 1 axis to the direction of Vmax.

**Table: Element Stresses - Slabs****Field: Area**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: AreaElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the area element for which the results are reported.

**Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the point element (node) at which the results are reported.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: S11Top**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S11 stress, at the top of the element, at the specified point, reported in the area element local coordinate system.

**Field: S22Top**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S22 stress, at the top of the element, at the specified point, reported in the area element local coordinate system.

**Field: S12Top**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S12 stress, at the top of the element, at the specified point, reported in the area element local coordinate system.

**Field: SMaxTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element maximum principal stress, at the top of the element, at the specified point.

**Field: SMinTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element minimum principal stress, at the top of the element, at the specified point.

**Field: SAngleTop**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the Area element local 1 axis to the direction of the maximum principal stress at the top of the element, at the specified point.

**Field: SVMTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element Von Mises stress, at the top of the element, at the specified point.

**Field: S11Bot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S11 stress, at the bottom of the element, at the specified point, reported in the area element local coordinate system.

**Field: S22Bot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S22 stress, at the bottom of the element, at the specified point, reported in the area element local coordinate system.

**Field: S12Bot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S12 stress, at the bottom of the element, at the specified point, reported in the area element local coordinate system.

**Field: SMaxBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element maximum principal stress, at the bottom of the element, at the specified point.

**Field: SMinBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element minimum principal stress, at the bottom of the element, at the specified point.

**Field: SAngleBot**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the Area element local 1 axis to the direction of the maximum principal stress at the bottom of the element, at the specified point.

**Field: SVMBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element Von Mises stress, at the bottom of the element, at the specified point.

**Field: S13Avg**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element average S13 out-of-plane shear stress at the specified point.

**Field: S23Avg**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element average S23 out-of-plane shear stress at the specified point.

**Field: SMaxAvg**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element maximum average out-of-plane shear stress. It is equal to the square root of the sum of the squares of S13Avg and S23Avg.

**Field: SAngleAvg**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area element local 1 axis to the direction of SMaxAvg.

**Table: Element Stresses - Slabs Midsurface****Field: Area**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: AreaElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the area element for which the results are reported.

**Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the point element (node) at which the results are reported.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: S11Mid**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S11 stress, at the midsurface of the element, at the specified point, reported in the area element local coordinate system.

**Field: S22Mid**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S22 stress, at the midsurface of the element, at the specified point, reported in the area element local coordinate system.

**Field: S12Mid**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S12 stress, at the midsurface of the element, at the specified point, reported in the area element local coordinate system.

**Field: SMaxMid**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element maximum principal stress, at the midsurface of the element, at the specified point.

**Field: SMinMid**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element minimum principal stress, at the midsurface of the element, at the specified point.

**Field: SAngleMid**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the Area element local 1 axis to the direction of the maximum principal stress at the midsurface of the element, at the specified point.

**Field: SVMMid**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element Von Mises stress, at the midsurface of the element, at the specified point.

**Field: S13Avg**

Field is Imported: No  
 Format: Stress Output (Stresses section of form)  
 Units: Force/Length2

The area element average S13 out-of-plane shear stress at the specified point.

**Field: S23Avg**

Field is Imported: No  
 Format: Stress Output (Stresses section of form)  
 Units: Force/Length2

The area element average S23 out-of-plane shear stress at the specified point.

**Field: SMaxAvg**

Field is Imported: No  
 Format: Stress Output (Stresses section of form)  
 Units: Force/Length2

The area element maximum average out-of-plane shear stress. It is equal to the square root of the sum of the squares of S13Avg and S23Avg.

**Field: SAngleAvg**

Field is Imported: No  
 Format: Angles (Structure Dimensions section of form)  
 Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area element local 1 axis to the direction of SMaxAvg.

**Table: Element Stresses - Walls And Ramps****Field: Area**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of an area object.

**Field: AreaElem**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of the area element for which the results are reported.

**Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the point element (node) at which the results are reported.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: S11Pos3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S11 stress, at the positive 3-axis side of the element, at the specified point, reported in the area element local coordinate system.

**Field: S22Pos3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S22 stress, at the positive 3-axis side of the element, at the specified point, reported in the area element local coordinate system.

**Field: S12Pos3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S12 stress, at the positive 3-axis side of the element, at the specified point, reported in the area element local coordinate system.

**Field: SMaxPos3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element maximum principal stress, at the positive 3-axis side of the element, at the specified point.

**Field: SMinPos3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element minimum principal stress, at the positive 3-axis side of the element, at the specified point.

**Field: SAnglePos3**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the Area element local 1 axis to the direction of the maximum principal stress at the positive 3-axis side of the element, at the specified point.

**Field: SVMPos3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element Von Mises stress, at the positive 3-axis side of the element, at the specified point.

**Field: S11Neg3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S11 stress, at the negative 3-axis side of the element, at the specified point, reported in the area element local coordinate system.

**Field: S22Neg3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

The area element internal S22 stress, at the negative 3-axis side of the element, at the specified point, reported in the area element local coordinate system.

**Field: S12Neg3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element internal S12 stress, at the negative 3-axis side of the element, at the specified point, reported in the area element local coordinate system.

**Field: SMaxNeg3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element maximum principal stress, at the negative 3-axis side of the element, at the specified point.

**Field: SMinNeg3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element minimum principal stress, at the negative 3-axis side of the element, at the specified point.

**Field: SAngleNeg3**

Field is Imported: No  
Format: Angles (Structure Dimensions section of form)  
Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the Area element local 1 axis to the direction of the maximum principal stress at the negative 3-axis side of the element, at the specified point.

**Field: SVMNeg3**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element Von Mises stress, at the negative 3-axis side of the element, at the specified point.

**Field: S13Avg**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The area element average S13 out-of-plane shear stress at the specified point.

**Field: S23Avg**

Field is Imported: No  
 Format: Stress Output (Stresses section of form)  
 Units: Force/Length2

The area element average S23 out-of-plane shear stress at the specified point.

**Field: SMaxAvg**

Field is Imported: No  
 Format: Stress Output (Stresses section of form)  
 Units: Force/Length2

The area element maximum average out-of-plane shear stress. It is equal to the square root of the sum of the squares of S13Avg and S23Avg.

**Field: SAngleAvg**

Field is Imported: No  
 Format: Angles (Structure Dimensions section of form)  
 Units: Degrees

The angle measured counterclockwise (when the local 3 axis is pointing toward you) from the area element local 1 axis to the direction of SMaxAvg.

**Table: Integrated Wall Forces****Field: Area**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of an area object.

**Field: OutputCase**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: Fx**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Integrated wall force in the global X axis direction.

**Field: Fy**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Integrated wall force in the global Y axis direction.

**Field: Fz**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Integrated wall force in the global Z axis direction.

**Field: Mx**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Integrated wall moment about the global X axis.

**Field: My**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Integrated wall moment about the global Y axis.

**Field: Mz**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Integrated wall moment about the global Z axis.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the reported forces.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the reported forces.

**Field: GlobalZ**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

**Table: Modal Periods And Frequencies****Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a modal load case.

**Field: ModeNum**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The mode number.

**Field: Period**

Field is Imported: No  
Format: Period (Time-Related section of form)  
Units: Sec

The period of the associated mode from the associated modal load case.

**Field: Frequency**

Field is Imported: No  
Format: Frequency (Time-Related section of form)  
Units: Cyc/sec

The cyclic frequency of the associated mode from the associated modal load case.

**Field: CircFreq**

Field is Imported: No  
Format: Controlled by program  
Units: rad/sec

The circular frequency of the associated mode from the associated modal load case.

**Field: Eigenvalue**

Field is Imported: No  
Format: Controlled by program  
Units: rad<sup>2</sup>/sec<sup>2</sup>

The eigenvalue of the associated mode from the associated modal load case.

**Table: Nodal Displacements****Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a node (point element).

**Field: Point**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a point object.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: Ux**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

Nodal displacement in the global X axis direction.

**Field: Uy**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

Nodal displacement in the global Y axis direction.

**Field: Uz**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

Nodal displacement in the global Z axis direction.

**Field: Rx**

Field is Imported: No

Format: Rotational Displ (Displacements section of form)

Units: Radians

Nodal rotation about the global X axis.

**Field: Ry**

Field is Imported: No

Format: Rotational Displ (Displacements section of form)

Units: Radians

Nodal rotation about the global Y axis.

**Field: Rz**

Field is Imported: No

Format: Rotational Displ (Displacements section of form)

Units: Radians

Nodal rotation about the global Z axis.

**Table: Nodal Displacements - Enveloping Summary****Field: Panel**

Field is Imported: No  
Format: Controlled by program  
Units: Text

.

**Field: OutputItem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The item for which output is reported. UzMax is the maximum value of vertical displacement in the panel. UzMin is the minimum value of vertical displacement in the panel.

**Field: DisplTrans**

Field is Imported: No  
Format: Translational Displ (Displacements section of form)  
Units: Length

The displacement for the specified output item at the specified node for the specified output case.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the node at which the displacement is reported.

**Field: GlobalX**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

Global X coordinate of the node at which the displacement is reported.

**Field: GlobalY**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

Global Y coordinate of the node at which the displacement is reported.

**Table: Nodal Displacements - Summary****Field: Panel**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

.

**Field: Node**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of the node at which the displacement is reported. This is the node within the specified panel that has the largest vertical translational displacement.

**Field: OutputCase**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: Ux**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

Nodal displacement at the specified node in the specified panel in the global X axis direction.

**Field: Uy**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

Nodal displacement at the specified node in the specified panel in the global Y axis direction.

**Field: Uz**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

Nodal displacement at the specified node in the specified panel in the global Z axis direction.

**Field: Rx**

Field is Imported: No

Format: Rotational Displ (Displacements section of form)

Units: Radians

Nodal rotation at the specified node in the specified panel about the global X axis.

**Field: Ry**

Field is Imported: No

Format: Rotational Displ (Displacements section of form)

Units: Radians

Nodal rotation at the specified node in the specified panel about the global Y axis.

**Field: Rz**

Field is Imported: No

Format: Rotational Displ (Displacements section of form)

Units: Radians

Nodal rotation at the specified node in the specified panel about the global Z axis.

**Field: MaxUzRel**

Field is Imported: No

Format: Translational Displ (Displacements section of form)

Units: Length

The maximum difference between the vertical displacements of any two nodes contained within the specified panel.

**Field: GlobalX**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

Global X coordinate of the node at which the displacement is reported.

**Field: GlobalY**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

Global Y coordinate of the node at which the displacement is reported.

**Table: Nodal Reactions****Field: Node**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a node (point element).

**Field: Point**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a point object.

**Field: OutputCase**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSStat, Hyperstatic, and Combination.

**Field: Fx**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Nodal reaction force in the global X axis direction.

**Field: Fy**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Nodal reaction force in the global Y axis direction.

**Field: Fz**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Nodal reaction force in the global Z axis direction.

**Field: Mx**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Nodal reaction moment about the global X axis.

**Field: My**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Nodal reaction moment about the global Y axis.

**Field: Mz**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Nodal reaction moment about the global Z axis.

**Table: Objects And Elements - Areas****Field: AreaElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of an area element.

**Field: AreaObject**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the area object from which the specified area element was created.

**Field: ElemPt1**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element that is a corner point of the area element.

**Field: ElemPt2**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element that is a corner point of the area element.

**Field: ElemPt3**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element that is a corner point of the area element.

**Field: ElemPt4**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element that is a corner point of the area element.

**Table: Objects And Elements - Lines****Field: LineElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a line element.

**Field: LineObject**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the line object from which the specified line element was created.

**Field: ElemPtI**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element at the I-end of the line element.

**Field: ElemPtJ**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element at the J-end of the line element.

**Table: Objects And Elements - Points****Field: PointElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a point element.

**Field: PointObject**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the point object from which the specified point element was created. If the point element was not created from a point object, but instead was created as a result of internal meshing by the program then this item is reported as None.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

Global X coordinate of the specified point element.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

Global Y coordinate of the specified point element.

**Field: GlobalZ**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

Global Z coordinate of the specified point element.

**Table: Panel Geometry****Field: Panel**

Field is Imported: No  
Format: Controlled by program  
Units: Text

.

**Field: PointNum**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The panel corner point considered.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

Global X coordinate of the specified panel corner point.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

Global Y coordinate of the specified panel corner point.

**Field: NumPoints**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The number of panel corner points.

**Table: Soil Pressures****Field: Area**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of an area object.

**Field: AreaElem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the area element for which the results are reported.

**Field: Node**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the point element (node) at which the results are reported.

**Field: OutputCase**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: SurfPress**

Field is Imported: No  
 Format: Force/Area (Forces section of form)  
 Units: Force/Length<sup>2</sup>

The surface pressure for the specified area at the specified node.

**Field: GlobalX**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The global X coordinate of the specified node.

**Field: GlobalY**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The global Y coordinate of the specified node.

**Table: Soil Pressures - Enveloping Summary****Field: Panel**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

.

**Field: OutputItem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This Is either MaxPress or MinPress indicating the output item.

MaxPress is the maximum soil pressure in the panel and MinPress in the minimum soil pressure.

**Field: SurfPress**

Field is Imported: No  
Format: Force/Area (Forces section of form)  
Units: Force/Length<sup>2</sup>

The value of the surface pressure output items: MaxPress or MinPress.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate the node with the specified pressure.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate the node with the specified pressure.

**Table: Soil Pressures - Summary****Field: Panel**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

**Field: OutputCase**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: MaxPress**

Field is Imported: No  
 Format: Force/Area (Forces section of form)  
 Units: Force/Length<sup>2</sup>

The maximum surface pressure for the specified panel.

**Field: MinPress**

Field is Imported: No  
 Format: Force/Area (Forces section of form)  
 Units: Force/Length<sup>2</sup>

The minimum surface pressure for the specified panel.

**Field: GlobalXMax**

Field is Imported: No  
 Format: Coordinates (Structure Dimensions section of form)  
 Units: Length

The global X coordinate the node with the maximum surface pressure for the specified panel.

**Field: GlobalYMax**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate the node with the maximum surface pressure for the specified panel.

**Field: GlobalXMin**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate the node with the minimum surface pressure for the specified panel.

**Field: GlobalYMin**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate the node with the minimum surface pressure for the specified panel.

**Table: Strip Forces****Field: Strip**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a strip object.

**Field: Station**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance measured from the start of the strip to the considered station.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Before or After indicating if the results reported are just before or just after the considered station.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: P**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Axial force in the strip local 1 axis direction at the specified station and location.

**Field: V2**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

Shear force in the strip local 2 axis direction at the specified station and location.

**Field: T**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Torsional moment about the strip local 1 axis at the specified station and location.

**Field: M3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

Bending moment about the strip local 3 axis at the specified station and location.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the considered station.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the considered station.

**Field: CutWidth**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The length of the strip cut line used to calculate strip forces at the considered station and location.

**Table: Strip Forces - Enveloping Summary****Field: Strip**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a strip object.

**Field: SpanID**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the strip.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Start, Middle or End indicating the location of the output along the specified span. The Start data is in the first quarter of the span, the Middle output is in the middle half of the span, and the End output is in the last quarter of the span.

**Field: OutputItem**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This Is either AbsMaxP, AbsMaxV2, AbsMaxT, MaxM3 or MinM3 indicating the output item.

AbsMaxP is the maximum axial force (by absolute value) in the strip local 1 axis direction within the specified location of the specified strip span.

AbsMaxV2 is the maximum shear force (by absolute value) in the strip local 2 axis direction within the specified location of the specified strip span.

AbsMaxT is the maximum torsional moment (by absolute value) about the strip local 1 axis direction within the specified location of the specified strip span.

MaxM3 and MinM3 are the maximum and minimum bending moments about the strip local 3 axis direction within the specified location of the specified strip span.

**Field: ValForce**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The value of the force-type output items: AbsMaxP and AbsMaxV2.

**Field: ValMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The value of the moment-type output items: AbsMaxT, MaxM3 and MinM3.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Table: Strip Forces - Summary****Field: Strip**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a strip object.

**Field: SpanID**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the strip.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Start, Middle or End indicating the location of the output along the specified span. The Start data is in the first quarter of the span, the Middle output is in the middle half of the span, and the End output is in the last quarter of the span.

**Field: OutputCase**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: AbsMaxP**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The maximum axial force (by absolute value) in the strip local 1 axis direction within the specified location of the specified strip span.

**Field: AbsMaxV2**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The maximum shear force (by absolute value) in the strip local 2 axis direction within the specified location of the specified strip span.

**Field: AbsMaxT**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The maximum torsional moment (by absolute value) about the strip local 1 within the specified location of the specified strip span.

**Field: MaxM3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The maximum bending moment about the strip local 3 within the specified location of the specified strip span.

**Field: MinM3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The minimum bending moment about the strip local 3 within the specified location of the specified strip span.

**Table: Sum Of Reactions****Field: OutputCase**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of a load case or load combination.

**Field: CaseType**

Field is Imported: No

Format: Controlled by program

Units: Text

The type of output case. This may be any one of the following: LinStatic, NonStatic, LinModal, LinRespSpec, LinModHist, NonModHist, LinDirHis, NonDirHist, LinMoving, LinBuckling, LinSteady, LinPower, LinMSSStat, Hyperstatic, and Combination.

**Field: GlobalFX**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The base reaction force component in the global X direction.

**Field: GlobalFY**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The base reaction force component in the global Y direction.

**Field: GlobalFZ**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The base reaction force component in the global Z direction.

**Field: GlobalMX**

Field is Imported: No

Format: Moment (Forces section of form)

Units: Force-Length

The base reaction moment component about the global X axis.

**Field: GlobalMY**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The base reaction moment component about the global Y axis.

**Field: GlobalMZ**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The base reaction moment component about the global Z axis.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the point where the base reaction is reported.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the point where the base reaction is reported.

**Field: GlobalZ**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Z coordinate of the point where the base reaction is reported.

**Table: Concrete Beam Design 01 - Flexural And Shear Data****Field: Line**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: BeamProp**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The beam property assigned to the line object.

**Field: Location**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance measured from the start point (I-End) of the line object to the location where the design output is reported.

**Field: FTopCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the flexural top bar area is reported.

**Field: FTopMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment for which the flexural top bar area is reported.

**Field: AxlForceT**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The axial force, moment for which the flexural rebar areas is reported.

**Field: FTopArea**

Field is Imported: No  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The total longitudinal top rebar area required for flexure at the specified location. This calculated value may be less than the required minimum reinforcing.

**Field: FTopAMin**

Field is Imported: No

Format: Rebar Area (Section Dimensions section of form)

Units: Length<sup>2</sup>

The minimum required top rebar area at the specified location. This minimum value may be less than the required reinforcing for strength.

**Field: FBotCombo**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the flexural bottom bar area is reported.

**Field: FBotMoment**

Field is Imported: No

Format: Moment (Forces section of form)

Units: Force-Length

The moment for which the flexural bottom bar area is reported.

**Field: AxlForceB**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The axial force, moment for which the flexural rebar areas is reported.

**Field: FBotArea**

Field is Imported: No

Format: Rebar Area (Section Dimensions section of form)

Units: Length<sup>2</sup>

The total longitudinal bottom rebar area required for flexure at the specified location. This calculated value may be less than the required minimum reinforcing.

**Field: FBotAMin**

Field is Imported: No

Format: Rebar Area (Section Dimensions section of form)

Units: Length<sup>2</sup>

The minimum required bottom rebar area at the specified location. This minimum value may be less than the required reinforcing for strength.

**Field: VCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the shear rebar area per unit length is reported.

**Field: VForce**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The shear force for which the area of transverse shear reinforcing is reported.

**Field: VArea**

Field is Imported: No  
Format: Rebar Area/Length (Section Dimensions section of form)  
Units: in<sup>2</sup>/ft

The required area of transverse shear reinforcing per unit length along the beam for shear at the specified location.

**Field: Status**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either OK or a message indicating a design failure at the considered location.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the specified output location.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the specified output location.

**Table: Concrete Beam Design Summary 01 - Flexural And Shear Data****Field: Line**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a line object.

**Field: SpanID**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the line object.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Start, Middle or End indicating the location of the output along the specified span. The Start data is in the first quarter of the span, the Middle output is in the middle half of the span, and the End output is in the last quarter of the span.

**Field: FTopCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the maximum flexural top bar area in the specified span location is reported.

**Field: FTopMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment for which the maximum flexural top bar area in the specified span location is reported.

**Field: FTopArea**

Field is Imported: No

Format: Rebar Area (Section Dimensions section of form)

Units: Length<sup>2</sup>

The maximum total longitudinal top rebar area required for flexure at the span specified location. This calculated value may be less than the required minimum reinforcing.

**Field: FBotCombo**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the maximum flexural bottom bar area in the specified span location is reported.

**Field: FBotMoment**

Field is Imported: No

Format: Moment (Forces section of form)

Units: Force-Length

The moment for which the maximum flexural bottom bar area in the specified span location is reported.

**Field: FBotArea**

Field is Imported: No

Format: Rebar Area (Section Dimensions section of form)

Units: Length<sup>2</sup>

The maximum total longitudinal bottom rebar area required for flexure at the span specified location. This calculated value may be less than the required minimum reinforcing.

**Field: VCombo**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the maximum shear rebar area per unit length in the specified span location is reported.

**Field: VForce**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The shear force for which the maximum shear rebar area per unit length in the specified span location is reported.

**Field: VArea**

Field is Imported: No

Format: Rebar Area/Length (Section Dimensions section of form)

Units: in<sup>2</sup>/ft

The maximum required area of transverse shear reinforcing per unit length along the beam for shear at the specified span location.

**Field: Status**

Field is Imported: No

Format: Controlled by program

Units: Text

This is either OK or a message indicating a design failure at the considered location.

**Table: Concrete Slab Design 01 - Flexural And Shear Data****Field: Strip**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a strip object.

**Field: Station**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The distance from the start of the strip to the output location.

**Field: ConcWidth**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The minimum concrete width for the strip at the specified output location.

**Field: FTopCombo**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the flexural top bar area per unit width is reported.

**Field: FTopMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment for which the flexural top bar area per unit width is reported.

**Field: FTopArea**

Field is Imported: No  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The longitudinal top rebar area per unit of strip width required for flexure at the specified location. This calculated value may be less than the required minimum reinforcing.

**Field: FTopAMin**

Field is Imported: No  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The minimum required top rebar area at the specified location. This minimum value may be less than the required reinforcing for strength.

**Field: FBotCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the flexural bottom bar area per unit width is reported.

**Field: FBotMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment for which the flexural bottom bar area per unit width is reported.

**Field: FBotArea**

Field is Imported: No  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The longitudinal bottom rebar area per unit of strip width required for flexure at the specified location. This calculated value may be less than the required minimum reinforcing.

**Field: FBotAMin**

Field is Imported: No

Format: Rebar Area (Section Dimensions section of form)

Units: Length<sup>2</sup>

The minimum required bottom rebar area at the specified location. This minimum value may be less than the required reinforcing for strength.

**Field: AxialForce**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The axial force, moment for which the flexural rebar areas is reported.

**Field: VCombo**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the maximum shear rebar area per unit length of strip at the specified location is reported.

**Field: VForce**

Field is Imported: No

Format: Force (Forces section of form)

Units: Force

The shear force for which the maximum shear rebar area per unit length of strip at the specified location is reported.

**Field: VArea**

Field is Imported: No

Format: Rebar Area/Length (Section Dimensions section of form)

Units: in<sup>2</sup>/ft

The maximum required area of transverse shear reinforcing per unit length along the strip for shear at the specified location.

**Field: Status**

Field is Imported: No

Format: Controlled by program

Units: Text

This is either OK or a message indicating a design failure at the considered location.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the specified output location.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the specified output location.

**Field: Layer**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either A, B or None indicating the layer to which the strip belongs.

**Table: Concrete Slab Design 02 - Punching Shear Data****Field: Point**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a point object.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the specified point object.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the specified point object.

**Field: ReinfType**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either None, Rebar Ties or Stud Rails indicating the punching shear reinforcement type.

**Field: Status**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The status of the punching shear design.

**Field: Ratio**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The calculated maximum punching shear ratio ( $\text{ShrStrMax}/\text{ShrStrCap}$ ).

**Field: NumRails**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The number of stud rails required, or, if rebar ties were specified, the number of bar sets. This item only applies when the ReinfType item is not None.

**Field: StudPerRail**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The number of studs required per rail, or, if rebar ties were specified, the number of single leg stirrups per bar set. This item only applies when the ReinfType item is not None.

**Field: Combo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The design load combination that produces the specified maximum punching shear ratio.

**Field: ShrStrMax**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The maximum shear stress produced by the specified combo.

**Field: ShrStrCap**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The shear stress capacity with the phi factor included.

**Field: ReinfPat**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Orthogonal or Radial indicating the punching shear reinforcement pattern. This item only applies when the ReinfType item is not None.

**Field: ReinfFy**

Field is Imported: No  
Format: Stress Input (Stresses section of form)  
Units: Force/Length<sup>2</sup>

The reinforcing yield stress. This item only applies when the ReinfType item is not None.

**Field: ReinfDiam**

Field is Imported: No  
Format: Length (Section Dimensions section of form)  
Units: Length

The reinforcing effective diameter. This item only applies when the ReinfType item is not None.

**Field: Gamma\_v2**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The fraction of unbalanced moment transferred by eccentricity of shear about the Column Local 2 axis.

**Field: Gamma\_v3**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

The fraction of unbalanced moment transferred by eccentricity of shear about the Column Local 3 axis.

**Field: Mu2**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment about the Column Local 2 axis from the specified combo.

**Field: Mu3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment about the Column Local 3 axis from the specified combo.

**Field: Vu**

Field is Imported: No  
Format: Force (Forces section of form)  
Units: Force

The shear force from the specified combo.

**Field: UnbalMu2**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The unbalanced moment about the Column Local 2 axis from the specified combo.

**Field: UnbalMu3**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The unbalanced moment about the Column Local 3 axis from the specified combo.

**Field: Depth**

Field is Imported: No  
Format: Length (Section Dimensions section of form)  
Units: Length

The average slab depth used in the punching shear calculation.

**Field: Perimeter**

Field is Imported: No  
Format: Length (Section Dimensions section of form)  
Units: Length

The perimeter of the critical section for punching shear.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is Interior, Edge or Corner indicating the punching shear condition.

**Table: Concrete Slab Design 03 - Flexural Stress Check 01 - Transfer****Field: Strip**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a strip object.

**Field: Station**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The distance from the start of the strip to the output location.

**Field: ConcWidth**

Field is Imported: No  
Format: Absolute Distance (Structure Dimensions section of form)  
Units: Length

The minimum concrete width for the strip at the specified output location.

**Field: CmbTensTop**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the transfer tension stress at top of slab is reported.

**Field: StTensTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Transfer tension stress at top of slab at the specified location for the specified combo.

**Field: DCTensTop**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Transfer demand capacity ratio for tension stress at top of slab at the specified location for the specified combo.

**Field: CmbCompTop**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the transfer compression stress at top of slab is reported.

**Field: StCompTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Transfer compression stress at top of slab at the specified location for the specified combo.

**Field: DCCompTop**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Transfer demand capacity ratio for compression stress at top of slab at the specified location for the specified combo.

**Field: CmbTensBot**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the transfer tension stress at bottom of slab is reported.

**Field: StTensBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Transfer tension stress at bottom of slab at the specified location for the specified combo.

**Field: DCTensBot**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Transfer demand capacity ratio for tension stress at top of slab at the specified location for the specified combo.

**Field: CmbCompBot**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the transfer compression stress at bottom of slab is reported.

**Field: StCompBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Transfer compression stress at bottom of slab at the specified location for the specified combo.

**Field: DCCompBot**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Transfer demand capacity ratio for compression stress at bottom of slab at the specified location for the specified combo.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the specified output location.

**Field: GlobalY**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the specified output location.

**Field: Layer**

Field is Imported: No

Format: Controlled by program

Units: Text

This is either A, B or None indicating the layer to which the strip belongs.

**Table: Concrete Slab Design 04 - Flexural Stress Check 02 - Normal****Field: Strip**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a strip object.

**Field: Station**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The distance from the start of the strip to the output location.

**Field: ConcWidth**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The minimum concrete width for the strip at the specified output location.

**Field: CmbTensTop**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the normal tension stress at top of slab is reported.

**Field: StTensTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Normal tension stress at top of slab at the specified location for the specified combo.

**Field: DCTensTop**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Normal demand capacity ratio for tension stress at top of slab at the specified location for the specified combo.

**Field: CmbCompTop**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the normal compression stress at top of slab is reported.

**Field: StCompTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Normal compression stress at top of slab at the specified location for the specified combo.

**Field: DCCompTop**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Normal demand capacity ratio for compression stress at top of slab at the specified location for the specified combo.

**Field: CmbTensBot**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the normal tension stress at bottom of slab is reported.

**Field: StTensBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Normal tension stress at bottom of slab at the specified location for the specified combo.

**Field: DCTensBot**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Normal demand capacity ratio for tension stress at top of slab at the specified location for the specified combo.

**Field: CmbCompBot**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the normal compression stress at bottom of slab is reported.

**Field: StCompBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Normal compression stress at bottom of slab at the specified location for the specified combo.

**Field: DCCompBot**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Normal demand capacity ratio for compression stress at bottom of slab at the specified location for the specified combo.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the specified output location.

**Field: GlobalY**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate of the specified output location.

**Field: Layer**

Field is Imported: No

Format: Controlled by program

Units: Text

This is either A, B or None indicating the layer to which the strip belongs.

**Table: Concrete Slab Design 05 - Flexural Stress Check 03 - Long Term****Field: Strip**

Field is Imported: No

Format: Controlled by program

Units: Text

Name of a strip object.

**Field: Station**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The distance from the start of the strip to the output location.

**Field: ConcWidth**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The minimum concrete width for the strip at the specified output location.

**Field: CmbTensTop**

Field is Imported: No

Format: Controlled by program

Units: Text

The name of the design load combination for which the long term tension stress at top of slab is reported.

**Field: StTensTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Long term tension stress at top of slab at the specified location for the specified combo.

**Field: DCTensTop**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Long term demand capacity ratio for tension stress at top of slab at the specified location for the specified combo.

**Field: CmbCompTop**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the long term compression stress at top of slab is reported.

**Field: StCompTop**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length2

Long term compression stress at top of slab at the specified location for the specified combo.

**Field: DCCompTop**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Long term demand capacity ratio for compression stress at top of slab at the specified location for the specified combo.

**Field: CmbTensBot**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the long term tension stress at bottom of slab is reported.

**Field: StTensBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

Long term tension stress at bottom of slab at the specified location for the specified combo.

**Field: DCTensBot**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Long term demand capacity ratio for tension stress at top of slab at the specified location for the specified combo.

**Field: CmbCompBot**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the long term compression stress at bottom of slab is reported.

**Field: StCompBot**

Field is Imported: No  
Format: Stress Output (Stresses section of form)  
Units: Force/Length<sup>2</sup>

Long term compression stress at bottom of slab at the specified location for the specified combo.

**Field: DCCompBot**

Field is Imported: No  
Format: Controlled by program  
Units: Unitless

Long term demand capacity ratio for compression stress at bottom of slab at the specified location for the specified combo.

**Field: GlobalX**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global X coordinate of the specified output location.

**Field: GlobalY**

Field is Imported: No  
Format: Coordinates (Structure Dimensions section of form)  
Units: Length

The global Y coordinate of the specified output location.

**Field: Layer**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either A, B or None indicating the layer to which the strip belongs.

**Table: Concrete Slab Design Summary 01 - Flexural And Shear Data****Field: Strip**

Field is Imported: No  
Format: Controlled by program  
Units: Text

Name of a strip object.

**Field: SpanID**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the strip.

**Field: Location**

Field is Imported: No  
Format: Controlled by program  
Units: Text

This is either Start, Middle or End indicating the location of the output along the specified span. The Start data is in the first quarter of the span, the Middle output is in the middle half of the span, and the End output is in the last quarter of the span.

**Field: FTopCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the flexural top bar area per unit width is reported.

**Field: FTopMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment for which the flexural top bar area per unit width is reported.

**Field: FTopArea**

Field is Imported: No  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The longitudinal top rebar area per unit of strip width required for flexure at the specified location. This calculated value may be less than the required minimum reinforcing.

**Field: FBotCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the flexural bottom bar area per unit width is reported.

**Field: FBotMoment**

Field is Imported: No  
Format: Moment (Forces section of form)  
Units: Force-Length

The moment for which the flexural bottom bar area per unit width is reported.

**Field: FBotArea**

Field is Imported: No  
Format: Rebar Area (Section Dimensions section of form)  
Units: Length<sup>2</sup>

The longitudinal bottom rebar area per unit of strip width required for flexure at the specified location. This calculated value may be less than the required minimum reinforcing.

**Field: VCombo**

Field is Imported: No  
Format: Controlled by program  
Units: Text

The name of the design load combination for which the maximum shear rebar area per unit length of strip at the specified location is reported.

**Field: VForce**

Field is Imported: No  
 Format: Force (Forces section of form)  
 Units: Force

The shear force for which the maximum shear rebar area per unit length of strip at the specified location is reported.

**Field: VArea**

Field is Imported: No  
 Format: Rebar Area/Length (Section Dimensions section of form)  
 Units: in<sup>2</sup>/ft

The maximum required area of transverse shear reinforcing per unit length along the strip for shear at the specified location.

**Field: Status**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

This is either OK or a message indicating a design failure at the considered location.

**Field: Layer**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

This is either A, B or None indicating the layer to which the strip belongs.

**Table: Concrete Slab Design Summary 02 - Span Definition Data****Field: Strip**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

Name of a strip object.

**Field: SpanID**

Field is Imported: No  
 Format: Controlled by program  
 Units: Text

This is either Cantilever Start, a span number (e.g., Span 2) or Cantilever End indicating the span location along the strip.

**Field: SpanLength**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The length of the specified span.

**Field: StartDist**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The distance from the start of the specified design strip to the start of the indicated span.

**Field: EndDist**

Field is Imported: No

Format: Absolute Distance (Structure Dimensions section of form)

Units: Length

The distance from the end of the specified design strip to the end of the indicated span.

**Field: GlobalX1**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate at the start of the indicated span.

**Field: GlobalY1**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate at the start of the indicated span.

**Field: GlobalX2**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global X coordinate at the end of the indicated span.

**Field: GlobalY2**

Field is Imported: No

Format: Coordinates (Structure Dimensions section of form)

Units: Length

The global Y coordinate at the end of the indicated span.