

Load Items: SelfWeight Load

[Load](#) » [Load: Load Case Details](#) » [Load Case Details: Load Items](#)

Functions

- afx_msg VARIANT [OSLoadUI::AddSelfWeightInXYZ](#) (const VARIANT FAR &varInDirection, const VARIANT FAR &varLoadFactor)
Adds a self weight to the active load case and assign it to all entities (beams, plates and solids).
- afx_msg VARIANT [OSLoadUI::AddSelfWeightInXYZToGeometry](#) (VARIANT FAR &varGeomNo, const VARIANT FAR &varInDirection, const VARIANT FAR &varLoadFactor)
Adds a self weight to plate(s), Beam(s) and Solid(s).

Detailed Description

These functions are related to self-weight load (not include seismic self-weight load).

Function Documentation

- ◆ [AddSelfWeightInXYZ\(\)](#)

```
VARIANT OSLoadUI::AddSelfWeightInXYZ ( const VARIANT FAR & varInDirection,
                                         const VARIANT FAR & varLoadFactor )
```

Adds a self weight to the active load case and assign it to all entities (beams, plates and solids).

Parameters

- [in] **varInDirection** Self weight direction index (= 1, 2, 3 for X, Y, Z, respectively).
- [in] **varLoadFactor** Multiplying factor for self-weight.

Return values

true Add self weight successful.

false General error.

C++ Syntax

```
// Add self weight in Y direction with factor -1.0
VARIANT RetVal = OSLoadUI::AddSelfWeightInXYZ(2, -1.0);
```

VBA Syntax

```
Option Explicit

Sub Main
    Dim objOpenStaad As Object
    Dim stdFile As String
    Set objOpenStaad = GetObject(,"StaadPro.OpenSTAAD")
    objOpenStaad.GetSTAADFfile stdFile, "TRUE"
    If stdFile="" Then
        MsgBox"Bad"
        Set objOpenStaad = Nothing
        Exit Sub
    End If
    Dim LoadNo As Long
    LoadNo = 1
    Dim bRes As Boolean
    bRes = objOpenStaad.Load.SetLoadActive(LoadNo)
    Dim nDirection As Integer
    nDirection = 2
    'Add self weight in Y direction with factor -1.0
    bRes = objOpenStaad.Load.AddSelfWeightInXYZ(nDirection, -1.0)
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSLoadUI::AddSelfWeightInXYZToGeometry](#)

◆ [AddSelfWeightInXYZToGeometry\(\)](#)

```
VARIANT OSLoadUI::AddSelfWeightInXYZToGeometry ( VARIANT FAR & varGeomNo,
                                                const VARIANT FAR & varInDirection,
                                                const VARIANT FAR & varLoadFactor )
```

Adds a self weight to plate(s), Beam(s) and Solid(s).

Parameters

- [in] **varGeomNo** Beam, Plate or Solid number ID(s) VARIANT array(Type:Long Array).
- [in] **varInDirection** Self weight direction index (= 1, 2, 3 for X, Y, Z, respectively).
- [in] **varLoadFactor** Multiplying factor for self-weight.

Return values

true OK.

false General error.

C++ Syntax

```
// Add self weight in Y direction with factor -1.0
VARIANT RetVal = OSLoadUI::AddSelfWeightInXYZToGeometry(varGeomNo, 2, -1.0);
```

VBA Syntax

```
Option Explicit
Sub Main
    Dim objOpenStaad As Object
    Dim stdFile As String
    Set objOpenStaad = GetObject(,"StaadPro.OpenSTAAD")
    objOpenStaad.GetSTAADFile stdFile, "TRUE"
    If stdFile="" Then
        MsgBox"Bad"
        Set objOpenStaad = Nothing
        Exit Sub
    End If
    Dim LoadNo As Long
    LoadNo = 1
    Dim bRes As Boolean
    bRes = objOpenStaad.Load.SetLoadActive(LoadNo)
    Dim nDirection As Integer
    nDirection = 2
    Dim beams(1) As Integer
    beams(0) = 30
    beams(1) = 31
    ' Add self weight in Y direction with factor -1.0
    bRes = objOpenStaad.Load.AddSelfWeightInXYZToGeometry(beams, nDirection, -1.0)
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSLoadUI::AddSelfWeightInXYZ](#)

