

Specification: Create Specification

Property

Functions

- afx_msg VARIANT **OSPropertyUI::CreateMemberReleaseSpec** (const VARIANT FAR &varLocation, const VARIANT FAR &varDOFRelease, const VARIANT FAR &varSpringConst)
Creates MEMBER RELEASE specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberPartialReleaseSpec** (const VARIANT FAR &varLocation, const VARIANT FAR &varDOFRelease, const VARIANT FAR &varFactor)
Creates MEMBER RELEASE specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberTrussSpec** ()
Create MEMBER TRUSS specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberInactiveSpec** ()
Create MEMBER INACTIVE specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberTensionSpec** ()
Create MEMBER TENSION specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberCompressionSpec** ()
Create MEMBER COMPRESSION specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberIgnoreStiffSpec** ()
Create ELEMENT IGNORE STIFFNESS specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberCableSpec** (const VARIANT FAR &varbTension, const VARIANT FAR &varfValue)
Create MEMBER CABLE specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberCableSpecEx** (const VARIANT FAR &varbTension, const VARIANT FAR &varfValue, const VARIANT FAR &varnAppliedEnd, const VARIANT FAR &varfFwX, const VARIANT FAR &varfFwY, const VARIANT FAR &varfFwZ)
Create MEMBER CABLE specification.
- afx_msg VARIANT **OSPropertyUI::CreateMemberOffsetSpec** (const VARIANT FAR &varnLocation, const VARIANT FAR &varnRefLocal, const VARIANT FAR &varfOffsetX, const VARIANT FAR &varfOffsetY, const VARIANT FAR &varfOffsetZ)
Create MEMBER OFFSET specification.
- afx_msg VARIANT **OSPropertyUI::CreateElementNodeReleaseSpec** (const VARIANT FAR &varNode, const VARIANT FAR &varDOFRelease)
Creates ELEMENT NODE RELEASE specification.
- afx_msg VARIANT **OSPropertyUI::CreateElementPlaneStressSpec** ()
Create ELEMENT PLANE STRESS specification.

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Create ELEMENT INPLANE ROTATION specification.

afx_msg VARIANT	OSPropertyUI::AddControlDependentRelation (const VARIANT FAR &varControlNode, const VARIANT FAR &varRegid_XY_YZ_ZX, const VARIANT FAR &varFX, const VARIANT FAR &varFY, const VARIANT FAR &varFZ, const VARIANT FAR &varMX, const VARIANT FAR &varMY, const VARIANT FAR &varMZ, const VARIANT FAR &varDependentNodeArray) Add a control/dependent joint specification to specified node(s).
afx_msg VARIANT	OSPropertyUI::CreateElementOffsetSpec (const VARIANT FAR &varnDirection, const VARIANT FAR &varnPlateNodeIndex, const VARIANT FAR &varfOffsetX, const VARIANT FAR &varfOffsetY, const VARIANT FAR &varfOffsetZ) Create ELEMENT OFFSET specification.
afx_msg VARIANT	OSPropertyUI::CreateElementLocalZOffsetSpec (const VARIANT FAR &varfZOffsetNode1, const VARIANT FAR &varfZOffsetNode2, const VARIANT FAR &varfZOffsetNode3, const VARIANT FAR &varfZOffsetNode4) Create ELEMENT OFFSET specification (Z-Offset).
afx_msg VARIANT	OSPropertyUI::CreateMemberFireProofingSpec (const VARIANT FAR &varnFireProofType, const VARIANT FAR &varfThickness, const VARIANT FAR &varfDensity) Create MEMBER FIREPROOFING specification.

Detailed Description

These functions are related to create specification.

Function Documentation

◆ AddControlDependentRelation()

```
VARIANT OSPropertyUI::AddControlDependentRelation ( const VARIANT FAR & varControlNode,
                                                    const VARIANT FAR & varRegid_XY_YZ_ZX,
                                                    const VARIANT FAR & varFX,
                                                    const VARIANT FAR & varFY,
                                                    const VARIANT FAR & varFZ,
                                                    const VARIANT FAR & varMX,
                                                    const VARIANT FAR & varMY,
                                                    const VARIANT FAR & varMZ,
                                                    const VARIANT FAR & varDependentNodeArray )
```

Add a control/dependent joint specification to specified node(s).

Parameters

[in] varControlNode	Set node (number ID) control node.
[in] varRegid_XY_YZ_ZX	Set plate rigid: all directions rigid (= 0), XY plate rigid (= 1), YZ plate rigid (= 2), ZX plate rigid (= 3), specific define FX, FY, FZ, MX, MY, MZ rigid (= others).
[in] varFX	Rigid in X direction translation (Rigid = 1, Not Rigid = 0).
[in] varFY	Rigid in Y direction translation (Rigid = 1, Not Rigid = 0).
[in] varFZ	Rigid in Z direction translation (Rigid = 1, Not Rigid = 0).
[in] varMX	Rigid in X direction rotation (Rigid = 1, Not Rigid = 0).
[in] varMY	Rigid in Y direction rotation (Rigid = 1, Not Rigid = 0).
[in] varMZ	Rigid in Z direction rotation (Rigid = 1, Not Rigid = 0).
[in] varDependentNodeArray	Nodes number ID VARIANT array.

Return values

- 0** OK.
- 106** 1 dimensional array of long expected.
- 6029** Library Error: Unable to create CONTROL/DEPENDENT specification.

C++ Syntax

```
// Set control node #3 and dependent nodes be rigid at varFX, varFY and varMZ.
VARIANT RetVal = OSPropertyUI::AddControlDependentRelation(3, -1, 1, 1, 0, 0, 0, 1);
```

VBA Syntax

```
' Set control node #3 and dependent nodes be rigid at varFX, varFY and varMZ.
Dim RetVal As VARIANT = OSPropertyUI.AddControlDependentRelation(3, -1, 1, 1, 0, 0, 0, 1)
```

OSPropertyUI::GetControlDependentRelationInfo

◆ CreateElementIgnoreInplaneRotnSpec()

VARIANT OSPropertyUI::CreateElementIgnoreInplaneRotnSpec()

Create ELEMENT INPLANE ROTATION specification.

Return values

<Val> The assigned specification number ID.

-6019 Library Error: Unable to create ELEMENT INPLANE ROTATION specification.

C++ Syntax

```
// Create specification.  
VARIANT RetVal = OSPropertyUI::CreateElementIgnoreInplaneRotnSpec();
```

VBA Syntax

```
' Create specification.  
Dim RetVal As VARIANT = OSPropertyUI.CreateElementIgnoreInplaneRotnSpec()
```

◆ CreateElementLocalZOffsetSpec()

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```
VARIANT OSPropertyUI::CreateElementLocalZOffsetSpec ( const VARIANT FAR & varfZOffsetNode1,
                                                    const VARIANT FAR & varfZOffsetNode2,
                                                    const VARIANT FAR & varfZOffsetNode3,
                                                    const VARIANT FAR & varfZOffsetNode4 )
```

Create ELEMENT OFFSET specification (Z-Offset).

Return values

<Val> The assigned specification number ID.

Parameters

- [in] **dZOffsetNode1** The offset at Node 1 for local-Z offset.
- [in] **dZOffsetNode2** The offset at Node 2 for local-Z offset.
- [in] **dZOffsetNode3** The offset at Node 3 for local-Z offset.
- [in] **dZOffsetNode4** The offset at Node 4 for local-Z offset.

Return values

<Val> The assigned specification number ID.

-6016 Library Error: Unable to create OFFSET specification.

C++ Syntax

```
// Create specification.
VARIANT RetVal = OSPropertyUI::CreateElementLocalZOffsetSpec(0.1, 0.2, 0.3, 0.4);
```

VBA Syntax

```
' Create specification.
Dim RetVal As VARIANT = OSPropertyUI.CreateElementLocalZOffsetSpec(0.1, 0.2, 0.3, 0.4))
```

◆ CreateElementNodeReleaseSpec()

```
VARIANT OSPropertyUI::CreateElementNodeReleaseSpec ( const VARIANT FAR & varNode,
                                                    const VARIANT FAR & varDOFRelease )
```

Creates ELEMENT NODE RELEASE specification.

Parameters

[in] **varNode** The node number ID to be released.

[in] **varDOFRelease** Degrees of freedom: No Release (= 0) or Release (= 1) for FX, FY, FZ, MX, MY and MZ.

Return values

0 OK

-106 1 dimensional array of long for **varDOFRelease** expected.

-108 Array size is smaller than expected (size should be 6).

-6021 Library Error: Unable to create ELEMENT NODE RELEASE specification.

Example

```
long varNode = 5;
long DOFRelease[6][1] = { {0}, {1}, {0}, {0}, {0}, {1} };

// Assemble VARIANT array varDOFRelease.
VARIANT varDOFRelease;
varDOFRelease.vt = VT_ARRAY | VT_I4;
SAFEARRAYBOUND SAB[2];
SAB[0].lLbound = 0; SAB[0].cElements = 6;
varDOFRelease.parray = SafeArrayCreate(VT_I4, 1, SAB);
for (long i = 0; i < 6; i++)
{ HRESULT hRet = SafeArrayPutElement(varDOFRelease.parray, &i, &DOFRelease[i]); }

// Create specification for node #5 releasing DOFs: FY and MZ.
VARIANT RetVal = OSPropertyUI::CreateElementNodeReleaseSpec(varNode, varDOFRelease);
```

◆ CreateElementOffsetSpec()

```
VARIANT OSPropertyUI::CreateElementOffsetSpec ( const VARIANT FAR & varnDirection,
                                                const VARIANT FAR & varnPlateNodeIndex,
                                                const VARIANT FAR & varfOffsetX,
                                                const VARIANT FAR & varfOffsetY,
                                                const VARIANT FAR & varfOffsetZ )
```

Create ELEMENT OFFSET specification.

Return values

<Val> The assigned specification number ID.

Parameters

[in] varnDirection	The offset direction at Local (= 0) or Global (= 1) of the element.
[in] varnPlateNodeIndex	The Node index at which the offset is to be applied for local and global directions (1/2/3/4).
[in] varfOffsetX	The offset x coordinate.
[in] varfOffsetY	The offset y coordinate.
[in] varfOffsetZ	The offset z coordinate.

Return values

<Val> The assigned specification number ID.

-6016 Library Error: Unable to create OFFSET specification.

C++ Syntax

```
// Create specification.
VARIANT RetVal = OSPropertyUI::CreateElementOffsetSpec(0, 1, 0.5, 0.0, 0.0);
```

VBA Syntax

```
' Create specification.
Dim RetVal As VARIANT = OSPropertyUI.CreateElementOffsetSpec(0, 1, 0.5, 0.0, 0.0)
```

◆ CreateElementPlaneStressSpec()

VARIANT OSPropertyUI::CreateElementPlaneStressSpec()

Create ELEMENT PLANE STRESS specification.

Return values

<Val> The assigned specification number ID.

-6018 Library Error: Unable to create ELEMENT PLANE STRESS specification.

C++ Syntax

```
// Create specification.  
VARIANT RetVal = OSPropertyUI::CreateElementPlaneStressSpec();
```

VBA Syntax

```
' Create specification.  
Dim RetVal As VARIANT = OSPropertyUI.CreateElementPlaneStressSpec()
```

◆ CreateMemberCableSpec()

VARIANT OSPropertyUI::CreateMemberCableSpec (const VARIANT FAR & varnTension,
const VARIANT FAR & varfValue)

Create MEMBER CABLE specification.

Parameters

- [in] **varnTension** Specify additional information about the cable:
 - 0 = **Initial TENSION** of Value in the cable to be considered.
 - 1 = **Unstressed LENGTH** of Value to be considered.
- [in] **varfValue** Value for **TENSION** or **Unstressed LENGTH**.

Return values

- <Val> The assigned specification number ID.
- 6015 Library Error: Unable to create MEMBER CABLE specification.

C++ Syntax

```
// Create initial tension of 4.5 to cable specification.  
VARIANT RetVal = OSPropertyUI::CreateMemberCableSpec(0, 4.5);
```

VBA Syntax

```
' Create initial tension of 4.5 to cable specification.  
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberCableSpec(0, 4.5)
```

See also

- [OSPropertyUI::CreateMemberTrussSpec](#)
- [OSPropertyUI::CreateMemberTensionSpec](#)
- [OSPropertyUI::CreateMemberCompressionSpec](#)
- [OSPropertyUI::AssignMemberSpecToBeam](#)
- [OSPropertyUI::GetMemberSpecCode](#)

◆ [CreateMemberCableSpecEx\(\)](#)

```
VARIANT OSPropertyUI::CreateMemberCableSpecEx ( const VARIANT FAR & varbTension,
                                                const VARIANT FAR & varfValue,
                                                const VARIANT FAR & varnAppliedEnd,
                                                const VARIANT FAR & varfFwX,
                                                const VARIANT FAR & varfFwY,
                                                const VARIANT FAR & varfFwZ )
```

Create MEMBER CABLE specification.

Parameters

- [in] **varnTension** Specify additional information about the cable:
0 = **Initial TENSION** of Value in the cable to be considered.
1 = **Unstressed LENGTH** of Value to be considered.
- [in] **varfValue** Value for **TENSION** or **Unstressed LENGTH**.
- [in] **varnAppliedEnd** Initial tension end for **TENSION**. To be used for Advanced Cable Analysis
0 = cable start or end node will not be considered.
1 = cable start node to be considered.
2 = cable end node to be considered.
- [in] **varfFwX** Multiplying factor on self weight component applied in the global X.
- [in] **varfFwY** Multiplying factor on self weight component applied in the global Y.
- [in] **varfFwZ** Multiplying factor on self weight component applied in the global Z.

Return values

- <Val> The assigned specification number ID.
- 6015 Library Error: Unable to create MEMBER CABLE specification.

C++ Syntax

```
// Create initial tension of 4.5 to cable specification at start node.
VARIANT RetVal = OSPropertyUI::CreateMemberCableSpec(0, 4.5, 1, 0.0, 0.0, 0.0);
```

VBA Syntax

```
' Create initial tension of 4.5 to cable specification at start node.
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberCableSpec(0, 4.5, 1, 0.0, 0.0, 0.0)
```

See also

- [OSPropertyUI::CreateMemberTrussSpec](#)
- [OSPropertyUI::CreateMemberTensionSpec](#)
- [OSPropertyUI::CreateMemberCompressionSpec](#)
- [OSPropertyUI::AssignMemberSpecToBeam](#)

◆ CreateMemberCompressionSpec()

VARIANT OSPropertyUI::CreateMemberCompressionSpec()

Create MEMBER COMPRESSION specification.

Return values

<Val> The assigned specification number ID.

-6013 Library Error: Unable to create MEMBER COMPRESSION specification.

C++ Syntax

```
// Create specification.  
VARIANT RetVal = OSPropertyUI::CreateMemberCompressionSpec();
```

VBA Syntax

```
' Create specification.  
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberCompressionSpec()
```

See also

[OSPropertyUI::CreateMemberTrussSpec](#)
[OSPropertyUI::CreateMemberTensionSpec](#)
[OSPropertyUI::CreateMemberCableSpec](#)
[OSPropertyUI::AssignMemberSpecToBeam](#)
[OSPropertyUI::GetMemberSpecCode](#)

◆ CreateMemberFireProofingSpec()

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```
VARIANT OSPropertyUI::CreateMemberFireProofingSpec ( const VARIANT FAR & varnFireProofType,
                                                    const VARIANT FAR & varfThickness,
                                                    const VARIANT FAR & varfDensity )
```

Create MEMBER FIREPROOFING specification.

Parameters

[in] **varnFireProofType** Specify type of fire proofing: (type - Long/Integer)
 1 = **BFP** Block Fireproofing.
 2 = **CFP** Contour Fireproofing.

[in] **varfThickness** Thickness of the Fireproofing (type - Double).

[in] **varfDensity** Density of the Fireproofing material (type - Double).

Return values

<Val> Zero based index for the newly created specification (-1: Unable to create MEMBER FIREPROOFING specification).

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 varRetVal As Long
    varRetVal = objOpenStaad.Property.CreateMemberFireProofingSpec(1, 2.0, 10.0)

    If varRetVal >= 0 Then
        MsgBox"Fire proofing specification created."
    Else
        MsgBox"Fire proofing specification not created."
    End If

    Set objOpenStaad = Nothing
End Sub
```

See also

[OSPropertyUI::CreateMemberTrussSpec](#)
[OSPropertyUI::CreateMemberTensionSpec](#)

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◆ CreateMemberIgnoreStiffSpec()

VARIANT OSPropertyUI::CreateMemberIgnoreStiffSpec ()

Create ELEMENT IGNORE STIFFNESS specification.

Return values

<Val> The assigned specification number ID.

-6014 Library Error: Unable to create IGNORE STIFFNESS specification.

C++ Syntax

```
// Create specification.
VARIANT RetVal = OSPropertyUI::CreateMemberIgnoreStiffSpec();
```

VBA Syntax

```
' Create specification.
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberIgnoreStiffSpec()
```

◆ CreateMemberInactiveSpec()

VARIANT OSPropertyUI::CreateMemberInactiveSpec ()

Create MEMBER INACTIVE specification.

Return values

<Val> The assigned specification number ID.

-6011 Library Error: Unable to create MEMBER INACTIVE specification.

C++ Syntax

```
// Create specification.
VARIANT RetVal = OSPropertyUI::CreateMemberInactiveSpec();
```

VBA Syntax

```
' Create specification.
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberInactiveSpec()
```

```
VARIANT OSPropertyUI::CreateMemberOffsetSpec ( const VARIANT FAR & varnLocation,
                                              const VARIANT FAR & varnRefLocal,
                                              const VARIANT FAR & varfOffsetX,
                                              const VARIANT FAR & varfOffsetY,
                                              const VARIANT FAR & varfOffsetZ )
```

Create MEMBER OFFSET specification.

Return values

<Val> The assigned specification number ID.

Parameters

- [in] **varnLocation** The offset location at START (= 0) or END (= 1) of the member.
- [in] **varnRefLocal** Offset with respect to Global axis (= 0) or Local axis (= 1).
- [in] **varfOffsetX** The offset x coordinate.
- [in] **varfOffsetY** The offset y coordinate.
- [in] **varfOffsetZ** The offset z coordinate.

Return values

<Val> The assigned specification number ID.

-6016 Library Error: Unable to create OFFSET specification.

C++ Syntax

```
// Create specification.
VARIANT RetVal = OSPropertyUI::CreateMemberOffsetSpec(0, 0, 0.5, 0.0, 0.0);
```

VBA Syntax

```
' Create specification.
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberOffsetSpec(0, 0, 0.5, 0.0, 0.0)
```

◆ CreateMemberPartialReleaseSpec()

```
VARIANT OSPropertyUI::CreateMemberPartialReleaseSpec ( const VARIANT FAR & varLocation,
                                                    const VARIANT FAR & varDOFRelease,
                                                    const VARIANT FAR & varFactor )
```

Creates MEMBER RELEASE specification.

Parameters

- [in] **varLocation** The offset location at START (= 0) or END (= 1) of the member.
- [in] **varDOFRelease** Degrees of freedom: No Release (= 0) or Release (= 1) for FX, FY, FZ, MX, MY and MZ.
- [in] **varFactor** The partial release factor in respective DOFs.

Return values

- 0** OK
- 106** 1 dimensional array of long for **varDOFRelease** and 1 dimensional array of double for **varFactor** expected.
- 108** Array size is smaller than expected (size should be 6).
- 6020** Library Error: Unable to create MEMBER RELEASE specification.

Example

```
long varLocation = 1;
long DOFRelease[6][1] = { {0}, {1}, {0}, {0}, {0}, {1} };
double Factor[6][1] = { {0.0}, {0.5}, {0.0}, {0.0}, {0.0}, {0.4} };

// Assemble VARIANT array varDOFRelease.
VARIANT varDOFRelease;
varDOFRelease.vt = VT_ARRAY | VT_I4;
SAFEARRAYBOUND SAB[2];
SAB[0].lLbound = 0; SAB[0].cElements = 6;
varDOFRelease.parray = SafeArrayCreate(VT_I4, 1, SAB);
for (long i = 0; i < 6; i++)
{ HRESULT hRet = SafeArrayPutElement(varDOFRelease.parray, &i, &DOFRelease[i]); }

// Assemble VARIANT array varFactor.
VARIANT varFactor;
varFactor.vt = VT_ARRAY | VT_R8;
SAFEARRAYBOUND SAB[2];
SAB[0].lLbound = 0; SAB[0].cElements = 6;
varFactor.parray = SafeArrayCreate(VT_R8, 1, SAB);
for (long i = 0; i < 6; i++)
{ HRESULT hRet = SafeArrayPutElement(varFactor.parray, &i, &Factor[i]); }

// Create member specification to release DOFs FY with release factor of 0.5 and MZ with
// release factor of 0.4.
VARIANT RetVal = OSPropertyUI::CreateMemberPartialReleaseSpec(varLocation, varDOFRelease,
                                                            varFactor);
```

VRA Syntax

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Option Explicit

```

Sub Main
    Dim objOpenStaad As Object
    Dim stdFile As String

    Dim StartEndRelease As Integer
    Dim MPRelease As Integer
    Dim RFactor As Double
    Dim PartialRelease(0 To 2) As Integer
    Dim ReleaseFactor(0 To 2) As Double
    Dim RetVal1 As Variant
    Dim RetVal2 As Variant

    Set objOpenStaad = GetObject(, "StaadPro.OpenSTAAD")
    objOpenStaad.GetSTAADFfile stdFile, "TRUE"
    If stdFile="" Then
        MsgBox"Bad"
        Set objOpenStaad = Nothing
        Exit Sub
    End If

    StartEndRelease = 1

    'For MP and MPFactor
    MPRelease=1           'MP
    RFactor=0.9            'MPFactor
    RetVal1 = objOpenStaad.Property.CreateMemberPartialReleaseSpec (StartEndRelease,
        MPRelease, RFactor)

    'For VARIANT array [MPX, MPY, MPZ]
    PartialRelease(0)=1   'MPX
    PartialRelease(1)=1   'MPY
    PartialRelease(2)=1   'MPZ
    ReleaseFactor(0)=0.3  'MPX Factor
    ReleaseFactor(1)=0.4  'MPY Factor
    ReleaseFactor(2)=0.5  'MPZ Factor
    RetVal2 = objOpenStaad.Property.CreateMemberPartialReleaseSpec (StartEndRelease,
        PartialRelease, ReleaseFactor)

    MsgBox"Macro Ending"
    Set objOpenStaad = Nothing
End Sub

```

See also

[OSPropertyUI::CreateMemberReleaseSpec](#)

- ◆ [CreateMemberReleaseSpec\(\)](#)

```
VARIANT OSPropertyUI::CreateMemberReleaseSpec ( const VARIANT FAR & varLocation,
                                              const VARIANT FAR & varDOFRelease,
                                              const VARIANT FAR & varSpringConst )
```

Creates MEMBER RELEASE specification.

Parameters

- [in] **varLocation** The offset location at START (= 0) or END (= 1) of the member.
- [in] **varDOFRelease** Degrees of freedom: No Release (= 0) or Release (= 1) for FX, FY, FZ, MX, MY and MZ.
- [in] **varSpringConst** The variable spring constants KFX, KFY, KFZ, KMX, KMY and KMZ.

Return values

- <Val> The assigned specification number ID.
- 106 1 dimensional array of long for **varDOFRelease** and 1 dimensional array of double for **varSpringConst** expected.
- 108 Array size is smaller than expected (size should be 6).
- 6020 Library Error: Unable to create MEMBER RELEASE specification.

Example

```
long varLocation = 1;
long DOFRelease[6][1] = { {0}, {1}, {0}, {0}, {0}, {1} };
long SpringConst[6][1] = { {0}, {75}, {0}, {0}, {0}, {50} };

// Assemble VARIANT array varDOFRelease.
VARIANT varDOFRelease;
varDOFRelease.vt = VT_ARRAY | VT_I4;
SAFEARRAYBOUND SAB[2];
SAB[0].lLbound = 0; SAB[0].cElements = 6;
varDOFRelease.parray = SafeArrayCreate(VT_I4, 1, SAB);
for (long i = 0; i < 6; i++)
{ HRESULT hRet = SafeArrayPutElement(varDOFRelease.parray, &i, &DOFRelease[i]); }

// Assemble VARIANT array varSpringConst.
VARIANT varSpringConst;
varSpringConst.vt = VT_ARRAY | VT_R8;
SAFEARRAYBOUND SAB[2];
SAB[0].lLbound = 0; SAB[0].cElements = 6;
varSpringConst.parray = SafeArrayCreate(VT_R8, 1, SAB);
for (long i = 0; i < 6; i++)
{ HRESULT hRet = SafeArrayPutElement(varSpringConst.parray, &i, &SpringConst[i]); }

// Create member specification to release DOFs FY with KY = 75 and MZ with KMZ = 50.
VARIANT RetVal = OSPropertyUI::CreateMemberReleaseSpec(varLocation, varDOFRelease,
                                                      varSpringConst);
```

See also

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◆ CreateMemberTensionSpec()

VARIANT OSPropertyUI::CreateMemberTensionSpec()

Create MEMBER TENSION specification.

Return values

<Val> The assigned specification number ID.

-6012 Library Error: Unable to create MEMBER TENSION specification.

C++ Syntax

```
// Create specification.  
VARIANT RetVal = OSPropertyUI::CreateMemberTensionSpec();
```

VBA Syntax

```
' Create specification.  
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberTensionSpec()
```

See also

[OSPropertyUI::CreateMemberTrussSpec](#)
[OSPropertyUI::CreateMemberCompressionSpec](#)
[OSPropertyUI::CreateMemberCableSpec](#)
[OSPropertyUI::AssignMemberSpecToBeam](#)
[OSPropertyUI::GetMemberSpecCode](#)

◆ CreateMemberTrussSpec()

VARIANT OSPropertyUI::CreateMemberTrussSpec ()

Create MEMBER TRUSS specification.

Return values

- <Val> The assigned specification number ID.
- 6010 Library Error: Unable to create MEMBER TRUSS specification.

C++ Syntax

```
// Create specification.  
VARIANT RetVal = OSPropertyUI::CreateMemberTrussSpec();
```

VBA Syntax

```
' Create specification.  
Dim RetVal As VARIANT = OSPropertyUI.CreateMemberTrussSpec()
```

See also

- [OSPropertyUI::CreateMemberTrussSpec](#)
- [OSPropertyUI::CreateMemberTensionSpec](#)
- [OSPropertyUI::CreateMemberCompressionSpec](#)
- [OSPropertyUI::CreateMemberCableSpec](#)
- [OSPropertyUI::AssignMemberSpecToBeam](#)
- [OSPropertyUI::GetMemberSpecCode](#)

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