## IFC Release Specific Concept Description (<IFC Release 2x3>)
### Precast Surface Treatment Property Set Assignment

<table>
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<tr>
<th>Reference</th>
<th>PCI-174</th>
<th>Version</th>
<th>1.1</th>
<th>Status</th>
<th>Draft</th>
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### Relationships
Assigns different properties like fire rating, fragility rating, acoustic rating and so on to the precast surface treatment.

### History
Revised Nov 18, 2012

### Authors
Shiva Aram

### Document Owner
Precast/Prestressed Concrete Institute

#### Usage in view definition diagram

- IFC2x4
  - Precast Surface Treatment
  - Precast Surface Treatment Property Set Assignment

#### Instantiation diagram

```
IfcCoveringType
+ GlobalId
+ OwnerHistory
+ Name
  + Description
  + ApplicableOccurrence
  + HasPropertySets
  + RepresentationMaps
  + Tag
+ ElementType
+ PredefinedType

IfcPropertySet
+ GlobalId
+ OwnerHistory
+ Name
  + Description
  + HasProperties
```

#### Implementation agreements:

**IfcPropertySet**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Implementation agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>GlobalId</td>
<td>Must be provided</td>
</tr>
<tr>
<td>OwnerHistory</td>
<td>Must be provided, but may contain dummy data</td>
</tr>
<tr>
<td>Name</td>
<td>String= “Pset_CoveringCommon” and/or “Pset_ConcreteElementSurfaceFinishQuantityGeneral”</td>
</tr>
<tr>
<td>Description</td>
<td>&lt;Open&gt;</td>
</tr>
<tr>
<td>HasProperties</td>
<td>Contained set of properties; Pset_CoveringCommon and/or Pset_ConcreteElementSurfaceFinishQuantityGeneral</td>
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Different precast surface treatments have specific properties in terms of finish type, thickness, texture, color, fire rating, acoustic rating and so on.