Generic AEC/FM View Description

Structural Design to Structural Analysis

Reference	VBL-001	**Version**	1.0	**Status**	Proposal
History	Based on work done by the IAI Structural Engineering Domain Group				
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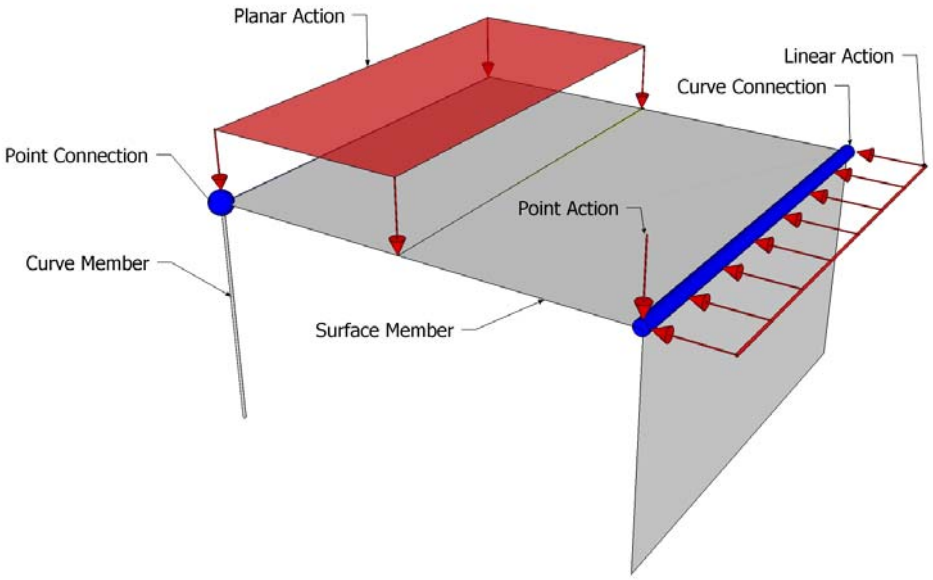
Description

In many structural analysis model applications the structural analysis model can be generated based on the structural design model. This view defines the structural analysis model which can be exchanged between the structural design applications and structural analysis applications. The exchange between architectural design and structural design is not covered by this view.



In the scope of the view are:

- structural analysis curve and surface members
- point, linear and planar loads
- load groups and cases
- point and curve connections
- material name
- profile name and section information

Also some general information of the analysis model is exchanged. In addition it is possible to identify and organize objects based on their properties and relationships.

The same view is used in all stages of the projects. The view does not make any difference between steel, concrete and timber constructions.

This view contains links between physical and analysis model, not the physical model itself.

Out of scope are analysis results, finite element topology and detailed results in finite element meshes, as well as all the internal forces, stresses and strains.

Only static forces are included, not dynamic forces, pre-stressed loads or the actions caused by a temperature change.

The view only defines the information that is exchanged. How this information is used often has to be agreed upon on a national or even project level.