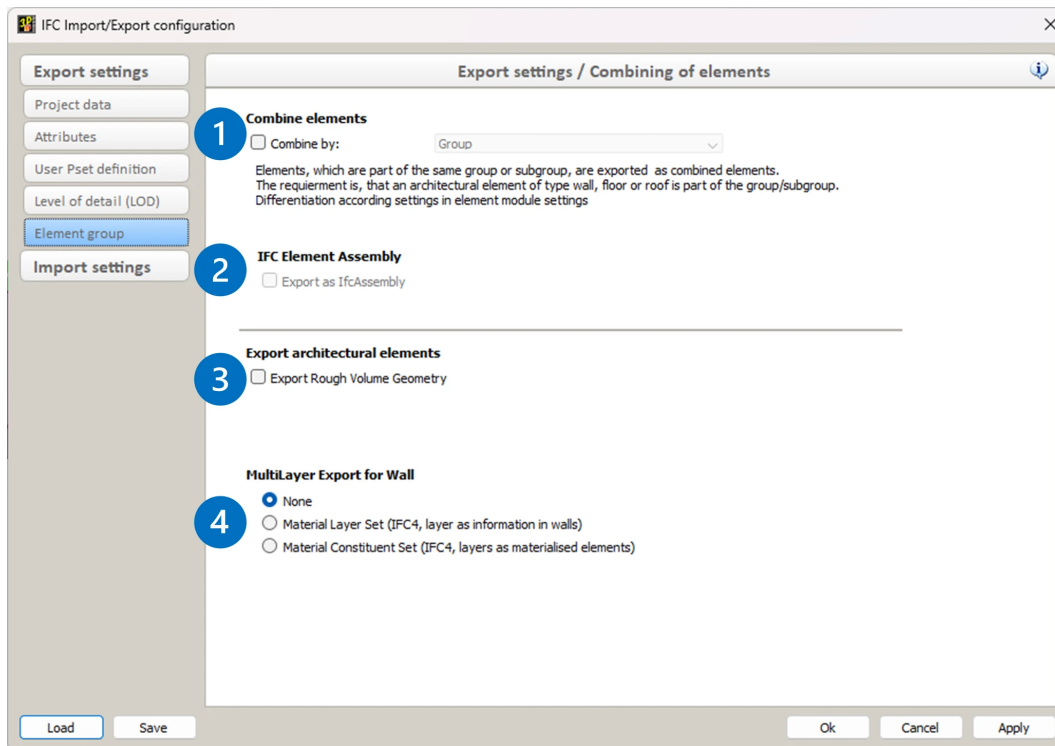


4.5 Elements



1. Combine elements (recommended)

If architectural rough volumes with components are created in a 3D file (e.g. [timber frame wall](#)) and divided into assemblies or building subgroups, the associated elements are exported to the IFC file with this option, e.g. as IfcWall.

If architectural elements are summarized according to assemblies or building subgroups, the envelopes (timber frame and block building envelopes) are not output. This is due to the fact that the individual components together represent the wall, ceiling or roof.



Source: standards.buildingsmart.org

2. IFC Element Assembly

The `IfcElementAssembly` entity represents complex element assemblies that are composed of several elements. These can be, for example, composite steel parts, trusses or stairs. If the checkbox is set, elements are not summarized as `IfcWall`, `IfcSlab`, or `IfcRoof`, but as `IfcElementAssembly`. In cadwork, we have been using container elements for a long time to group elements in an `IfcElementAssembly`.

Elements that are combined in container elements are exported in cadwork as `IfcElementAssembly` by default. This function cannot be influenced.

3. Export architectural elements (Framed Wall, Roof, Floor)

If it is necessary to export the rough volumes for further steps, they can also be exported by activating this option (not recommended). Solid walls, solid roofs and solid floors are always exported as they are available as "real" components. It is not necessary to activate this option for elements of the type Solid Wall, Floor or Roof.

4. MultiLayer Export for Wall

Here you can define how the layers of the multi-layer wall should be exported. "Material Layer Set" exports the layer structure as pure information. "Material Constituent Set" exports the individual layers as individual volumes which are summarized by the IFC type IfcWall. The top option does not take the layers into account in any case.