This framework is part of a Thesis research of the Master track Building Technology at Delft University of Technology.

Goals of this framework:
- Facilitate knowledge and solutions of critical materials in the built environment.
- Optimize material selection processes and application of materials for building products.
- Provide a standardized dataset which can be linked to large scale stocks and flow projects.
- Inform stakeholders during the whole life time of a building about critical materials.

CRITICAL MATERIALS List European Commission 2017

- Antimony
- Baryte
- Beryllium
- Bismuth
- Borate
- Cobalt
- Coking coals
- Felspar
- Gallium
- Germanium
- Hafnium
- Helium
- HREE and LREEs (16)
- Indium
- Magnesium
- Natural graphite
- Natural rubber
- Niobium
- Phosphorus
- Scandium
- Silicon metal
- Silicones
- Silicones (15)
- Silicones (16)
- Silicones (17)
- Silicones (18)
- Sodium nitrate
- Sodium nitrate (15)
- Tantalum
- Tungsten
- Vanadium
- Ytterbium
- Yttrium
- Zirconium (5)
- Zirconium (16)

Parameters:
- Economic importance (end-use applications and manufacturing industries)
- Supply risk (risk of disruption in EU supply based on concentrations primarily supply)

Note:
- Criticality might change during building lifetime; take more into account than only the EU list.

This overview presents a standardized data set in Industry Foundation Class (IFC), which is available for all BIM applications. The acquired data and linked Property Sets aim to optimize the lifetime of materials and facilitate knowledge of critical materials.