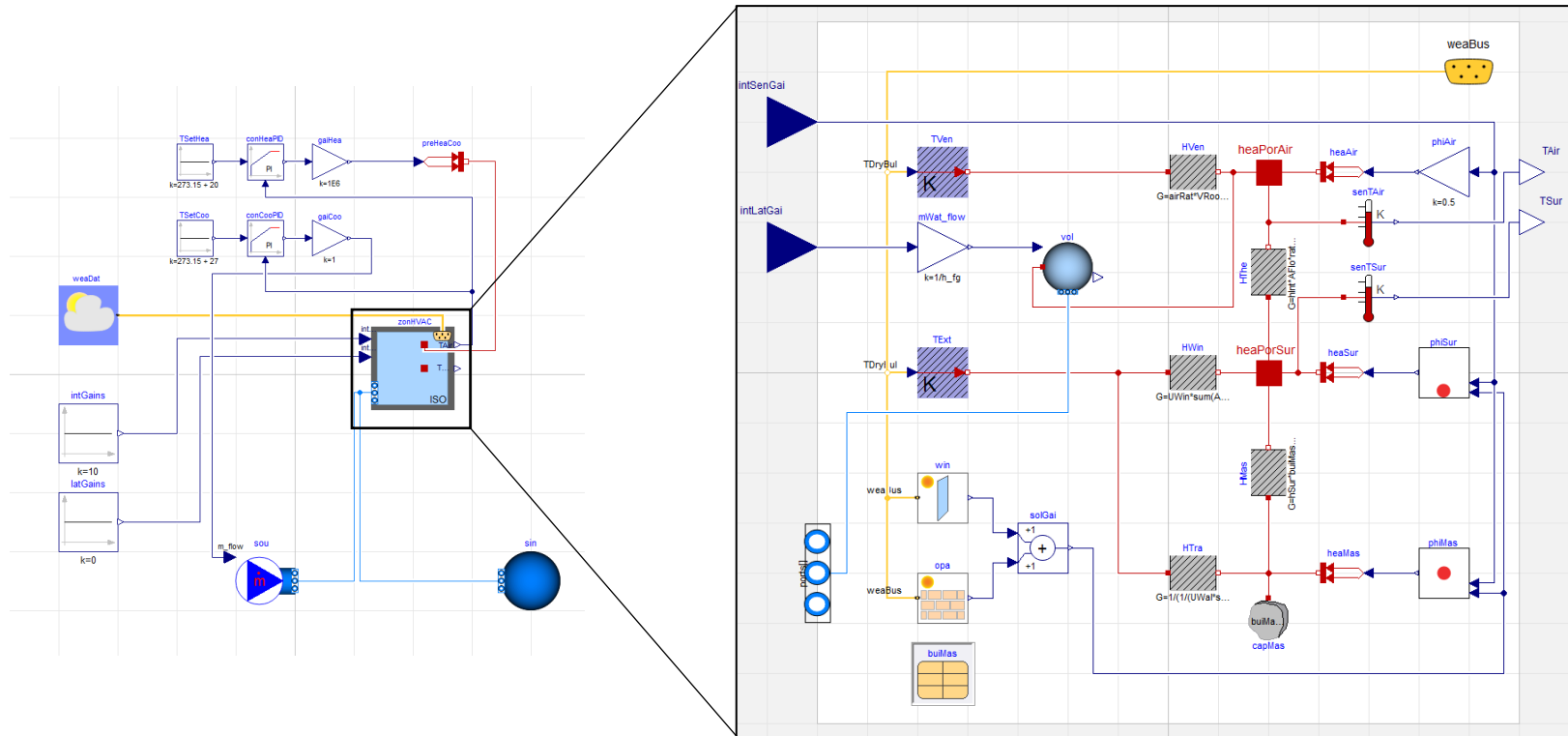
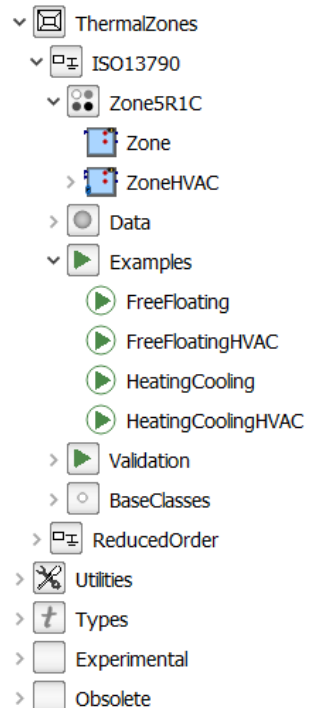


# Reduced-order building model (based on ISO13790 Standard)

- Useful for urban energy simulations
  - ❑ **Easy to parametrize:** 15 parameters easily understandable
  - ❑ **Fast:** ~1s for annual simulation in free-floating, ~ 2-3s with (ideal) heating and cooling system
  - ❑ **Acceptable accuracy:** Validated with BESTEST 600 and 900 (annual results are pretty good, hourly results are ok)



# Reduced-order building model (based on ISO13790 Standard)

Add **template building models** that include pre-defined internal gains, ventilation systems and ideal heating and cooling for different building typologies

- Residential (occupancy schedule / CAV with recovery unit)
- Office (occupancy schedule / CAV with recovery unit and free cooling)
- School etc.

The goal is to make a direct parametrization of these Modelica models in a 3D environment (Blender)

