

Energy Codes: Building Additions in COMcheck

By Tim Belcher, NBG Energy Lead — March 2019

This month's Energy Codes article focuses on how to deal with building additions in COMcheck. More specifically, how we deal with shared walls between an Existing Building and a Building Addition.

When entering a building addition in COMcheck you must first select the "Addition" Project Type from the Project tab.

Project Envelope Interior Lighting Exterior Lighting	Mechanical	Req	uirements							
Location			Building Envelope Area Types			Interior Lighting Method and Areas			Exterior Lighting Areas	
State Texas Texas Texas		Add Delete Duplicate								
Climate zone: 3a			B	Building Type		Area Description		W/ft2	2 Space Conditioning	
Project Type			Warehouse		•	Name	6400	0.66	Nonresidential	•
New Construction Addition Alterations										

Additions are treated the same as New Construction in COMcheck except that common walls shared between the existing building and the addition are ignored. This means that no information should be input for those common walls. In the labeled rendering below you can see the "REW" is shared by the existing building (shown as framing) and the building addition (shown with exterior panels).





If entering the above building in COMcheck you would see the building walls entered as depicted below with the LEW, FSW, and BSW walls appearing on the Envelope tab. The REW would not be included because it is shared with the existing building.

Project Envelope Interior Lighting Exterior Lighting Mechanical Requirements												
Roof Skylight Exterior Wall Semi-Exterior Wall Window Door Basement Floor												
	Component		Assembly	Building Area Type	Orientation	Fenestration Details	Construction Details	Gross Area or Slab Perimeter	Units			
	▼ B	uilding										
1		FS Roof	Metal Building - Standing Seam 🛛 💌	1 - Name (💌			Filled Cavity with Thermal Blocks 💌	3211	ft2			
2		BS Roof	Metal Building - Standing Seam 🛛 💌	1 - Name (💌			Filled Cavity with Thermal Blocks 💌	3211	ft2			
3		LEW	Other Metal Building Wall 🔹	1 - Name (💌	West 🔻			1685	ft2			
4		FSW	Other Metal Building Wall 🔹	1 - Name (💌	South 🔻			2500	ft2			
5		Door 1 (Overhead 240" x 168")	Other Door 🔹				Non-Swinging 💌	280	ft2			
6		Door 2 (Overhead 240" x 168")	Other Door 🗸				Non-Swinging 💌	280	ft2			
7		Door 3 (Overhead 240" x 168")	Other Door 🗸				Non-Swinging	280	ft2			
8		Door 4 (WalkDoor 76" x 86")	Other Door 🗸				Swinging 💌	45	ft2			
9		BSW	Other Metal Building Wall 🔹	1 - Name (💌	North 🔻			2500	ft2			

A scenario where the REW from the above referenced rendering would be included is if the REW of the new building were higher than the shared wall of the existing building. In this case the new wall area constructed above the existing wall would need to be included because it is part of the new construction.

For more information contact the Energy Hotline at 844-682-6724.