



Building Performance Standard 5.1c: Guidelines for Moderate and Substantial Rehab Projects Addendum

Issued October 1, 2011 - Effective Immediately Upon Release

Certain building construction types undergoing a moderate or substantial rehabilitation as defined by the 2011 Enterprise Green Communities Criteria are unable to achieve a Home Energy Rating System (HERS) Index of 85¹ as required by Enterprise Green Communities mandatory criterion 5.1c without undertaking drastic renovations to the building envelope that may not be feasible under the project scope and budget. These building types either do not have insulation, and/or their construction type (e.g., double- or triple-brick masonry construction) does not allow for them to install insulation. In response, Enterprise has developed the following alternative compliance pathway.

Alternative Compliance Pathway Building Performance Standard 5.1c - Single Family and Low-Rise Multifamily (3 stories or fewer)

Single family and low-rise multifamily (3 stories or fewer) moderate rehab projects built pre-1980, OR single family and low-rise multifamily (3 stories or fewer) substantial rehab projects built pre-1980 that have walls made of only brick / masonry walls are eligible to use the addendum. Substantial rehab projects that were built after 1980 and/or used other construction methods besides brick / masonry, such as wood frame construction, cannot use this addendum.

Eligible projects must meet the following requirements.

1. Achieve a HERS Index of 100 or less,
2. Projects must follow the guidance under the “recommendations” section of the Criterion 5.1c of the 2011 Enterprise Green Communities Criteria,
3. Replace the cooling, heating and domestic hot water equipment with the minimum efficiencies indicated in the table below^{2,3}.

Climate Zone / State	Cooling System ⁴	Heating System ⁴ above	Domestic Hot Water
1,2,3	≥ 14.5 SEER/ 12 EER ENERGY STAR qualified A/C; OR ≥ 14.5 SEER/ 12 EER/ 8.2 HSPF ENERGY STAR qualified heat pump	≥ 80 AFUE gas furnace; OR ≥ 14.5 SEER/ 12 EER/ 8.2 HSPF ENERGY STAR qualified heat pump; OR ≥ 80 AFUE boiler; OR Heating Equipment ≥ 80 AFUE oil furnace	Gas (EF): 40 Gal = 0.61 60 Gal = 0.57 80 Gal = 0.53
4,5	≥ 13 SEER A/C; OR ≥ 14.5 SEER/ 12 EER/ 8.5 HSPF ENERGY STAR qualified heat pump	≥ 90 AFUE gas furnace; OR ≥ 14.5 SEER/ 12 EER/ 8.5 HSPF ENERGY STAR qualified heat pump; OR ≥ 85 AFUE boiler; OR ≥ 85 AFUE oil furnace	Electric (EF): 40 Gal = 0.93 50 Gal = 0.92 80 Gal = 0.89 Oil or Gas: Integrated with space heating boiler
6,7	≥ 13 SEER	≥ 90 AFUE gas furnace; OR ≥ 85 AFUE boiler; OR ≥ 85 AFUE oil furnace	

¹ Buildings rehabilitated to a Home Energy Rating System (HERS) Index of 85 will achieve approximately 2009 IECC energy performance levels.

² Mechanical equipment efficiencies in the table are taken from the ENERGY STAR Version 2 Builder Option Packages

³ In addition to the ENERGY STAR requirements, Enterprise requires that all combustion equipment or appliances be power-vented or closed-combustion per Criterion measure 7.8.

⁴ All systems must be “right-sized” according to the ENERGY STAR Version 2 requirements

Climate Zone / State	Cooling System ⁵	Heating System ⁴ above	Domestic Hot Water
Florida	≥ 14.5 SEER/ 12 EER ENERGY STAR qualified A/C; OR ≥ 14.5 SEER/ 12 EER/ 8.2 HSPF ENERGY STAR qualified heat pump	≥ 80 AFUE gas furnace; OR ≥ 14.5 SEER/ 12 EER/ 8.2 HSPF ENERGY STAR qualified heat pump; OR ≥ 80 AFUE boiler; OR ≥ 80 AFUE oil furnace	Gas (EF): 40 Gal = 0.61 60 Gal = 0.57 80 Gal = 0.53 Electric (EF): 40 Gal = 0.93 50 Gal = 0.92 80 Gal = 0.89 Oil or Gas: Integrated with space heating boiler
Attached Homes (Climate Zones 1,2,3)	≥ 14 SEER/ 11.5 EER ENERGY STAR qualified A/C; OR ≥ 14 SEER/ 11.5 EER ENERGY STAR qualified heat pump	80% AFUE, OR 8.2 HSPF	Gas (EF): 40 Gal = 0.61 60 Gal = 0.57 80 Gal = 0.53 Electric (EF): 40 Gal = 0.93 50 Gal = 0.92 80 Gal = 0.89
Attached Homes (Climate Zones 4,5,6,7)	≥ 14 SEER/ 11.5 EER ENERGY STAR qualified A/C; OR ≥ 14 SEER/ 11.5 EER ENERGY STAR qualified heat pump	≥ 90% AFUE ENERGY STAR qualified gas furnace; OR ≥ 8.5 HSPF ENERGY STAR qualified heat pump; OR ≥ 85% AFUE ENERGY STAR qualified boiler or furnace	Gas (EF): 40 Gal = 0.61 60 Gal = 0.57 80 Gal = 0.53 Electric (EF): 40 Gal = 0.93 50 Gal = 0.92 80 Gal = 0.89
Hawaii	If installing a cooling system use an ENERGY STAR qualified and right-sized ≥ 14 SEER / 11.5 EER Air Conditioner or Heat Pump; OR, ENERGY STAR qualified and Room Air Conditioner	N/A	HECO's "Energy\$olutionsSM for the Home"-approved Solar Hot Water System with 100 point inspection by utility-approved inspector

⁵ All systems must be "right-sized" according to the ENERGY STAR Version 2 requirements