

Chapter 11: Green Building & Energy Efficiency

11-A Introduction

CDBG-DR subrecipients are required to incorporate green building and energy efficiency measures into their new construction, reconstruction, and rehabilitation projects. HUD identifies a number of different industry-recognized standards that DLG selected from and incorporated into each program's policy. These standards may differ from program to program.

11-B Overview

HUD requires that grantees incorporate measures that will result in a project which meets green and resilient building standards. A distinction is made between rehabilitation and new construction, reconstruction, or substantial rehabilitation, with different requirements necessary for both.

DLG generally expects the subrecipient to adhere to the Kentucky Housing Corporation's Minimum Design Standards which can be found at <https://www.kyhousing.org/Partners/Inspections-and-Compliance/Pages/Design-and-Construction.aspx>.

Green and Resilient Building Standard for New Construction, Reconstruction, & Substantial Rehabilitation

11-C New Construction, Reconstruction, & Substantial Rehabilitation

DLG requires that the subrecipient select and adhere to the Green and Resilient Building Standard for new construction and reconstruction of housing as required by HUD. The subrecipient must meet this standard for all residential new construction, reconstruction, and rehabilitation of substantially damaged buildings. HUD defines substantial damage and substantial improvement, with limited exceptions, in 44 CFR 59.1 as:

***Substantial damage** means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.*

***Substantial improvement** means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed.*

Selection Options

Each project must meet an industry-recognized standard that has achieved certification under one of the following:

- Enterprise Green Communities. Program and compliance information can be found here: <https://www.greencommunitiesonline.org/checklist>

- LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development). Program and compliance information can be found here: <https://www.usgbc.org/resources?LEED+Resources=%5B%22Checklists%22%5D>
- ICC–700 National Green Building Standard Green+Resilience. Program and compliance information can be found here: <https://www.iccsafe.org/building-safety-journal/bsj-hits/2020-national-green-building-standard-now-available-for-free-download/>
- Living Building Challenge. Program and compliance information can be found here: <https://living-future.org/lbc/resources/>
- *Or any other equivalent comprehensive green building program. DLG would need to pre-approve the standard.*

In addition to the selection options above, the project must also meet one of the following minimum energy efficiency standards such as:

- ENERGY STAR (Certified Homes or Multifamily High-Rise). Program and compliance information can be found here: https://www.energystar.gov/sites/default/files/asset/document/ES%20Certified%20Homes%20QA%20Checklist_Rev%2012.pdf
- DOE Zero Energy Ready Home. Program and compliance information can be found here: <https://www.energy.gov/eere/buildings/doe-zero-energy-ready-home-zerh-program-requirements>
- EarthCraft House, EarthCraft Multifamily. Program and compliance information can be found here: <https://earthcraft.org/resources/>
- Passive House Institute Passive Building or EnerPHit certification from the Passive House Institute US (PHIUS), International Passive House Association. Program and compliance information can be found here: <https://www.phius.org/resources/tools-and-support/certification-support>
- Greenpoint Rated New Home, Greenpoint Rated Existing Home (Whole House or Whole Building label). Program and compliance information can be found here: <https://www.builditgreen.org/greenpoint-rated/documents-checklists>
- Earth Advantage New Homes, <https://www.earthadvantage.org/resources/new-homes.html>
- *Or any other equivalent energy efficiency standard acceptable to HUD.*

Many of the green building standards incorporate energy efficiency standards. The subrecipient should review the standards and choose which one they would like to implement for their project. Then fill out attachment 11-1 Project Standards Selection Form to inform DLG of their choice. The subrecipient must identify within each project file which of these standards will be used and must also include the appropriate scoring metrics which demonstrates the extent to which the project is in compliance with the selected metric.

Attachment 11-1: Project Standards Selection Form

11- D Rehabilitation of Non-substantially Damaged Residential Buildings

For rehabilitation of residential projects other than those described as “substantial”, DLG requires that the subrecipient adhere to the *HUD CPD Green Building Retrofit Checklist*. Subrecipients must apply these guidelines to the extent applicable for the rehabilitation work undertaken, for example:

When replacing or repairing bathrooms, kitchens, and laundry rooms, use materials that have durable, cleanable surfaces.

Products and appliances replaced as part of the rehabilitation work must be ENERGY STAR-labeled, WaterSense-labeled, or Federal Energy Management Program (FEMP).

When replacing windows, install geographically appropriate ENERGY STAR rated windows.

Utilizing Low/No VOC Adhesives and Sealants.

The HUD CPD Green Building Retrofit Checklist promotes energy efficiency and green building practices for residential retrofit projects. Subrecipients must follow the checklist in its entirety and apply all measures within the Checklist to the extent applicable to the particular building type being retrofitted. The phrase “when replacing” in the Checklist refers to the mandatory replacement with specified green improvements, products, and fixtures only when replacing those systems during the normal course of the retrofit.

Attachment 11-2: HUD CPD Green
Retrofit Checklist

Note: DLG does not expect the subrecipient to attempt to bring into compliance items which are outside of the rehabilitation scope.

11- E Monitoring and Compliance

Award

The Green Building and Energy Efficiency requirements are acknowledged by submitting selection certification with their evidentiary material. The DLG project manager will request the form 11-1 for New Construction, Reconstruction, & Substantial Rehabilitation. Your project manager will also assist you in understanding the requirements and additional documentation needed.

Housing Policy

As discussed in this chapter, depending on the housing program different requirements will be met in terms of green and resilient building requirements. Interim monitoring and compliance will be listed in the individual housing policy.

Project Close-out

At the completion of the project, as part of the required forms for close-out a final verification that green building requirements have been achieved per the program policy will be submitted to DLG. The project file needs to contain the final completed checklist for the applicable standard(s). Should an instance arise in which the project may be at risk of running afoul of the requirements, the subrecipient should contact DLG for further guidance.

Below is a flowchart which identifies the different allowable options within the Industry Recognized Standards as well as the Energy Efficiency Standards.

It should be noted that while HUD identifies the combination of these two different standards as the Green and Resilient Building Standard, there is a fair amount of overlap between the two groups and they should not be viewed as one being “Green” and the other being “Resilient”.

