OMB Control Number: 2060-0586
Expiration Date: XX-XX-XXXX
EPA Form Number: 5900-422

ENERGY STAR MULTIFAMILY HIGH RISE PROGRAM
Photo Template Version 1.1

Project Name:
Address:
Date:

INSTRUCTIONS

Use this template as a sample format to comply with the photo documentation requirements outlined in the *ENERGY STAR MFHR Testing and Verification Protocols and Worksheets*. Add, delete or re-size photo boxes and descriptions as necessary.

EPA suggests compressing the resolution of photos prior to inserting into the template to make the file size more manageable, however all nameplates and details demonstrating compliance must be clearly identifiable.

Tip: Once the cursor is inside the desired photo box, select 'Insert'→'Picture'→'From File' from the menu above in order to automatically resize the photos to fit the boxes.

Table of Contents

APPLIANCES – PROTOCOL 1.1

Refrigerators

Notes: Nameplate (list model number here if illegible)	Notes: ENERGY STAR label

Dishwashers

Notes: Nameplate (list model number here if illegible)	Notes: ENERGY STAR label

Clothes Washers

Notes: Clothes washer (s) Installed	Notes: Nameplate (list model number here if illegible)

Notes: ENERGY STAR label	Notes:

HVAC – HEATING AND DHW SYSTEMS – PROTOCOL 2.1, 2,2, 5.1, 5.3

Heating Units / Systems

Notes: Apt equipment – (image of mechanical closet, boiler room, etc)	Notes: Apt equipment – nameplate (list model number here if illegible)

Notes: Common Area equipment – (image of mechanical closet, boiler room,	Notes: Common Area equipment - nameplate (list model number here if

DHW Units / Systems

Notes: DHW system – (image of mechanical closet, boiler room, etc)	Notes: DHW system nameplate (list model number here if illegible)

Notes: Central DHW tank storage insulation (if applicable)	Notes: Central DHW Electronic mixing valve temperature set point

Heating Pipe Insulation

Notes: Space Heating pipes insulation in boiler room	Notes: Thickness measurement

Notes: Space Heating pipe riser insulation	Notes: Thickness measurement

DHW Pipe Insulation

Notes: DHW pipes insulation	Notes: Thickness measurement

Notes: DHW pipe riser insulation	Notes: Thickness measurement

Duct Insulation

Notes: Duct insulation (indoors)	Notes: Duct insulation (outdoors)

Notes: Duct insulation (in apartment units if applicable)	Notes:

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PLUMBING FIXTURES – APARTMENT UNITS

Fixtures & Flow Rates

Notes: Kitchen faucet GPM (list model and GPM here if illegible)	Notes: Bathroom faucet GPM (list model and GPM here if illegible)

Notes: Showerhead GPM & WaterSense label (list model/GPM here if illegible)	Notes: Toilet GPF & WaterSense label (list model/GPF here if illegible)

In-Unit DHW Delivery and Storage Temperature

Notes: Kitchen faucet temperature (not to exceed 125F)	Notes: Bathroom faucet temperature (not to exceed 125F)

Notes: Showerhead temperature (not to exceed 125F)	Notes: In-unit Storage DHW temperature (not to exceed 140F)

ENVELOPE – BELOW GRADE WALLS – PROTOCOL 3.1

Notes: BG Wall Insulation type	Notes: Thickness measurement

Notes: Continuous insulation around corner, other challenging details	Notes: Continuous insulation around corner, other challenging details
Notes: Pre-insulation showing application of water/vapor/air barrier	Notes: Post-installation overall

ENVELOPE – ABOVE GRADE WALLS – PROTOCOL 3.1

Notes: AG Wall Insulation type	Notes: Thickness measurement

Notes: Continuous insulation around corner, other challenging details	Notes: Continuous insulation around corner, other challenging details

Notes: Pre-insulation showing application of water/vapor/air barrier	Notes: Barrier general coverage and appropriate thickness

Notes: Post-insulation indicating proper installation	Notes: Pre-installation to verify framing construction

Notes: Completion showing proper drywall installation	Notes: Plank/Slab Edge and Rim Joist insulation between ceiling/floor levels before cladding is installed

ENVELOPE – ROOF – PROTOCOL 3.2

Roof Insulation

Notes: Roof Insulation type	Notes: Thickness measurement

Notes: Continuous insulation around corner, other challenging details	Notes: Continuous insulation around corner, other challenging details

Notes: Post-insulation (pre-drywall for cavity insulation, prior to roof finish for exterior grid insulation) showing complete and even distribution of insulation	Notes: Proper enclosure of insulated cavities (if applicable)

ENVELOPE – FLOORS – PROTOCOL 3.3

Floor Insulation

Notes: Floor Insulation type	Notes: Thickness measurement

Notes: Continuous insulation around corner, other challenging details	Notes: Continuous insulation around corner, other challenging details

Notes: Sub-slab insulation before pouring of concrete or backfilling	Notes: Proper moisture or insect protection (if required)

Notes: Framed floors, post-insulation showing proper installation and no signs of compromised R-value	Notes:

ENVELOPE – WINDOWS – PROTOCOL 3.4

Window Thermal Ratings and Sealing

Notes: Each unique window type with third party verification of U-value, SHGC, and ENERGY STAR Label (if applicable)	Notes: Each unique window type with third party verification of U-value, SHGC, and ENERGY STAR Label (if applicable)

Notes: Installed window that verifies proper fit and effective connections to envelope's weather and air barriers	Notes: Low-e detector for windows (if applicable)

ENVELOPE – EXTERIOR DOORS – PROTOCOL 3.5

Exterior Doors

Notes: Installed door that verifies proper fit and effective connections to envelope's weather and air barriers	Notes: Each unique door type with 3rd party verification, NFRC and/or Energy Star label (if applicable)

GARAGES - VENTILATION FANS WITH CO SENSORS (if applicable) – PROTOCOL 4.1

Notes: Garage fan	Notes: Garage fan nameplate (list model number if illegible)

Notes: CO/NO2 Sensors	Notes: Air intake point

HVAC – COOLING – PROTOCOL 5.2, 5.4

Cooling Units

Notes: Apartment equipment nameplate (list model number if illegible)	Notes: Apartment equipment nameplate(list model number if illegible)

Notes: Common area equipment nameplate(list model number if illegible)	Notes: Common Are equipment nameplate(list model number if illegible)

LIGHTING – PROTOCOL 6.1-6.3

Instructions: Include photos of each unique fixture, showing nameplate, wattage, lumens output, fixture type (if T5/T8) or Energy Star label as applicable.

Fixture A

Location (all that apply):

Location:	Notes: General

Notes: Nameplate or wattage	Notes: Bulb or ENERGY STAR label

Fixture B

Location (all that apply):

Location:	Notes: General

Notes: Nameplate or wattage	Notes: Bulb or ENERGY STAR label

Fixture C

Location (all that apply):

Location:	Notes: General

Notes: Nameplate or wattage	Notes: Bulb or ENERGY STAR label

Fixture D

Location (all that apply):

Location:	Notes: General

Notes: Nameplate or wattage	Notes: Bulb or ENERGY STAR label

Fixture E

Location (all that apply):

Location:	Notes: General

Notes: Nameplate or wattage	Notes: Bulb or ENERGY STAR label

LIGHTING CONTROLS – COMMON AREAS

Common Area Lighting Controls

Notes: Corridor occupancy sensors	Notes: Corridor space when sensors are activated

Notes: Stairwell occupancy sensors	Notes: Stairwell space when sensors are activated

Notes: Trash room occupancy sensors	Notes: Janitor's closet occupancy sensors

Notes: Office occupancy sensors	Notes: Bi-level lighting (if applicable)

LIGHTING CONTROLS – EXTERIOR

Exterior Lighting Controls

Notes: Photo cell or timer	Notes: Photo cell or timer

Notes: Daylight sensor, fixture off during the day	Notes: Daylight sensor, fixture on when daylight sensor is covered

HVAC – MOTORS AND VFDs – PROTOCOL 7.1

Location and use:	Location and use:
Location and use:	Location and use:

ENVELOPE – EXTERIOR AIR BARRIER – PROTOCOL 3.1, 8.1

From the Exterior

Notes: Areas with liquid-applied membranes showing appropriate thickness	Notes: A/C Openings
Notes: Windows	Notes: Door Openings
Notes: Door Frame	Notes: Transition between wall and roof barrier

Notes: Transition between wall and foundation barrier	Notes: Plank/Slab Edge (Masonry and Steel Construction) or Rim Joist (Wood Framed Construction)

From the Interior

Notes: Rough openings to windows and doors	Notes: A/C Openings

Notes: Additional photos (if necessary)	Notes: Additional photos (if necessary)

INFILTRATION – COMPARTMENTALIZATION AND BLOWER DOOR TEST – PROTOCOL 8.1

From the Interior

Notes: Window to interior gypsum board	Notes: Air conditioner sleeve to drywall (cover is installed if A/Cs provided by building)

Notes: Outlet/Electrical Box – Exterior to Demising Walls	Notes: Heating pipe penetrations through exterior walls
Notes: Heating pipe penetrations through interior walls	Notes: Plumbing/sprinkler pipe penetrations

Notes: Range gas line penetrations	Notes: Gypsum board to concrete ceiling plank connection – exterior walls and all interior partition walls

Notes: Gap between take off duct and gypsum board	Notes: Electrical panel

Notes: HVAC access doors	Notes: Thermostats

Notes: Intercoms	Notes: Lighting fixtures

Notes: Door latch hole	Notes: Medicine cabinet

VENTILATION – SCHEDULE AND OPERATION – PROTOCOL 8.2

Notes: Fan installation	Notes: Kitchen exhaust outlet to exterior (through-wall systems only)

Notes: Exhaust fan nameplate (list model number if illegible)	Notes: Exhaust fan nameplate (list model number if illegible)

Notes: Exhaust fan nameplate (list model number if illegible)	Notes: Exhaust fan nameplate (list model number if illegible)

Notes: Exhaust fan nameplate (list model number if illegible)	Notes: Exhaust fan nameplate (list model number if illegible)

VENTILATION – DUCT TIGHTNESS TEST – PROTOCOL 8.2

For central ventilation systems

Notes: Sealed roof curb penetration	Notes: Mastic or other UL-181 compliant material applied within temperature range and according to all other manufacturer's requirements at ALL transverse joints and take offs

Notes: All duct transitional junctions sealed with mastic or other UL-181 compliant material	Notes: Gap between take off duct and gypsum board effectively sealed

For in-line fan exhaust systems

Notes: Mastic or other UL-181 compliant material applied within temperature range and according to all other manufacturer's requirements at ALL transverse joints and take offs	Notes: All duct transitional junctions sealed with mastic or other UL-181 compliant material

Notes: If plank core is to be used as a duct – ceiling plank penetration sealed	Notes: If plank core is to be used as a duct – plank core effectively connected

Notes: Appropriate plank core selected that aligns with exterior louver	Notes: Additional photos (if necessary)connected to exterior of building

METERS – CONFIGURATION – PROTOCOL 9.1

Gas, Water, Electric Meters

Notes: Gas meters	Notes: Water meter
Notes: Electrical meters	Notes: Electrical meters