BUILDING INFORMATION SURVEY

This survey collects detailed information about multi-family buildings weatherized (or waitlisted) by your agency that have been selected for analysis by the national evaluation. The data you supply will be used with billing history data to better understand energy savings attributable to the Weatherization Assistance Program.

Please use this form to provide information about small or large multifamily buildings in which the whole building and all units in the building were weatherized or are waitlisted. The Housing Unit Information Survey should be used to document information on any single family detached and attached houses, mobile homes, or individual units within multi-family buildings. Refer to the definitions of each building type provided at the end of the survey because these definitions are slightly different than those commonly used within the Weatherization Assistance Program.

Public reporting burden for this collection of information is estimated to average eight hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Records Management Division, IM-11, Paperwork Reduction Project (1910-5151), U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC, 20585-1290; and to the Office of Management and Budget (OMB), OIRA, Paperwork Reduction Project (1910-5151), Washington, DC 20503.

All of the information obtained from this survey will be protected and will remain confidential. The data will be analyzed in such a way that the information provided cannot be associated back to your state, your agencies, or the housing units and clients that your state served.

Form completed by:	Date:
Building identification number (provided by the eval	luation team):
IDENTIFICATION	
1. Subgrantee (agency) name:	
2. State:	
3. Agency job number:	
4. Building name:	
5. Site address:	6. City:

7. If this building is currently waitlisted, check here \square and complete only the Building Information and Households sections below.

WEATHERIZATION INFORMATION

Weatherization dates (not audit or inspection dates):

8a. Started:8b. Completed:(month)(day)(year)

9. Was this a "reweatherized" building? *(check only one)*

☐ Yes☐ No☐ Don't know

10. Does the building meet your state's definition for being a high residential energy user? *(check only one)*

Yes
No
No state definition in place
Not applicable
Don't know

11. Did the building owner or any occupants of housing units within the building file a complaint about the weatherization services you provided? *(check only one)*

YesNoDon't know

BUILDING INFORMATION

12. Building type – see definitions at end of form: *(check only one)*

Small multifamily building (2-4 units per building and not a SF attached house)
 Large multifamily building (5 or more units per building and not a SF attached house)
 Don't know

13. Number of housing units in the building: _____

14. Number of housing units in the building that met the Program's eligibility requirements: _____

15. Number of stories above grade: (check only one)

- $\Box 1$
- 2
- 3
- 4
- **5-9**
- 010-19
- 20 or more
- Don't know

16. Year building originally built: (check only one)

2000 or later
1990 to 1999
1980 to 1989
1970 to 1979
1960 to 1969
1950 to 1959
1940 to 1949
1930 to 1939
1920 to 1929
1910 to 1919
1900 to 1909
Before 1900
Don't know

Conditioned floor area at the time of weatherization:

17a. Heated floor area: _____ ft²

Don't know

17b. Air conditioned floor area: _____ft²

Don't know

18. Primary fuel used to heat the building during the winter before weatherization: *(check only one)*

- Natural gas
 Propane/LPG
 Kerosene (#1 fuel oil)
 Fuel oil #2
 Fuel oil #4
 Fuel oil #5L
 Fuel oil #5H
 Fuel oil #6
 Electricity
 Wood
 Coal
 Steam (purchased from a central distribution system)
 Hot water (purchased from a central distribution system)
 Other (specify: _____)
- Don't know

19. Type of *primary* space-heating system before weatherization: *(check only one)*

□ Central (ducted) warm-air furnace (forced-air or gravity, any fuel including electricity) □ Heat pump

Built-in electric units (e.g., electric baseboards, ceiling heat)

Steam or hot water system (e.g., floor or baseboard radiators, convectors)

☐ Floor, wall, or pipeless (ductless) furnace (e.g., floor or wall furnace)

Room/space heater (nonportable)

Portable space heater

Cooking stove

🛛 None

Don't know

20. Was the primary space-heating system a central system? (check only one)

Section Yes, a central system that supplied heat to all or most of the units in the building

□ No, each unit had its own heating system

Don't know

21. *Supplemental* fuel used to heat the unit during the winter before weatherization: *(check all that apply)*

Natural gas
Propane/LPG
Kerosene (#1 fuel oil)
Fuel oil (#2 fuel oil)
Electricity
Wood
Other (specify: _____)
None
Don't know

22. Type of *operable* air conditioning system present before weatherization: *(check all that apply)*

Central air conditioner/heat pump

Uindow/wall units

Evaporative cooling system ("swamp coolers")

🛛 None

Don't know

23. Number of window/wall air conditioning units: (check only one)

- 🛛 None
- 1-4
- □ **5-9**
- □ 10-19 □ 20 40
- 20-49
- 50 or more
- Don't know

AUDIT

24. Primary method used to select weatherization measures for this building (excluding health, safety, and repair measures and general heat waste measures): *(check only one)*

☐ Priority list

Calculation procedure (e.g., spreadsheet, computerized audit)

Other (specify: _____)

25. If a calculation procedure was used, the name of the procedure(s): (check all that apply)

AK Warm
EA-3
EASY
EA-QUIP
HomeCheck
Meadows
REES
REM/Rate
SMOC-ERS
TIPS
TREAT
Weatherization Assistant (NEAT/MHEA)
WXEOR
Other (specify: _____)
Not applicable

DIAGNOSTICS AND INSPECTIONS

Indicate which of the following diagnostic measurements and inspections were performed by your agency on **THIS** building and when they were performed: *(check all that apply)*

Diagnostic measurement or inspection	Diagnostic/inspection performed during:		
	Audit/house assessment	Measure installation	Post- inspection
Pressure diagnostics:			
26a. Blower door measurement (building air leakage rate)			
26b. Zonal pressure			
26c. Room-to-room pressures (distribution system balancing)			
26d. Duct pressure pan measurements			
26e. Duct blower measurement (duct air leakage rate)			
26f. Blower door subtraction meas. (duct air leakage rate)			
Space-heating system:			
27a. Flue gas analysis (steady-state efficiency measurement)			
27b. Heat rise			
27c. CO level in flue			
27d. CO level of equipment room			
Space-heating system (continued):			

Diagnostic measurement or inspection	Diagnostic/inspection performed during:		
	Audit/house assessment	Measure installation	Post- inspection
27e. Draft/spillage (normal operation)			
27f. Worst case draft/spillage (CAZ)			
27g. Safety inspection			
Air-conditioning system:			
28a. Refrigerant charge (e.g., superheat or subcooling)			
28b. Safety inspection			
HVAC components:			
29a. Air handler flow rate			
29b. Thermostat anticipator current			
Hot-water (water-heating) system:			
30a. Flue gas analysis (steady-state efficiency measurement)			
30b. CO level in flue			
30c. CO level of equipment room			
30d. Draft/spillage (normal operation)			
30e. Worst case draft/spillage (CAZ)			
30f. Hot water temperature			
30g. Shower head flow rate			
30h. Faucet flow rate			
30i. Safety inspection			
Other CO measurements:			
31a. Cook stove			
31b. Kitchen			
31c. Main living area			
Other diagnostics and inspections:			
32a. Refrigerator energy use			

Diagnostic measurement or inspection	Diagnostic/inspection performed during:		
	Audit/house assessment	Measure installation	Post- inspection
32b. Exhaust fan air flow rate			
32c. Infrared scanning (camera)			
32d. Radon testing			
32e. Other (specify:)			
32f. Other (specify:)			
32g. Other (specify:)			

Record the diagnostic measurements taken on **THIS** housing unit: *(fill in all that were taken)*

Diagnostic measurement	Pre-	Post	
	weatherization	weatherization	
Building air leakage (blower door measurement):			
33a. Air leakage rate	cfm	cfm	
33b. House WRT outside pressure difference	Pa	Ра	
Duct leakage (pressure pan measurements):			
34a. Sum of pressure pan readings	Ра	Pa	
34b. Number of registers included in sum			
34c. House WRT outside pressure difference	Ра	Ра	
Duct leakage (duct blower measurements):			
35a. Total duct leakage rate	cfm	cfm	
35b. Duct leakage to the outside	cfm	cfm	
35c. Duct WRT outside pressure difference	Ра	Ра	
Steady-state efficiency (flue gas analysis):			
36a. Primary space-heating system	%	%	
36b. Secondary space-heating system	%	%	
36c. Hot water heater	%	%	

MEASURES INSTALLED

Identify the measures that were installed on **THIS** building: *(check all that apply)*

Measure	Installed by	
	In-house crew	Contractor
Air sealing work:		
37a. General house caulking and weatherstripping (e.g., doors, windows)		
37b. House air sealing emphasizing bypasses (leaks identified by auditor and/or crew without using a blower door)		
37c. House air sealing emphasizing bypasses (leaks identified by auditor and/or crew with aid of a blower door)		
37d. Air distribution system (duct) sealing and repair		
37e. Other non-window air sealing work (specify:)		
Insulation:		
38a. Attic insulation (installed where there was no existing insulation)		
38b. Attic insulation (added to existing insulation)		
38c. Wall insulation (normal density—two-hole gravity blow technique)		
38d. Wall insulation (high density—one-hole tube-fill technique)		
38e. Floor insulation		
38f. Rim or band joist insulation		
38g. Foundation wall insulation		
38h. Duct insulation		
38i. White roof coat		
38j. Skirting		
38k. Other insulation (specify:)		
Windows:		
39a. New window (justified because cost effective)		
39b. New window (justified for reason other than cost effectiveness)		
39c. Window glazings		
39d. New window screen		

Measure	Installed by	
	In-house	Contractor
Windows (continued):	crew	
39e. Window lock replacement		
39f. Window screen repair		
39g. Other window repair (e.g., sashes, frames)		
39h. Storm window		
39i. Window shading (e.g., awning, film, sun screen)		
39j. Other window treatments (specify:)		
Doors:		
40a. New door (justified because cost effective)		
40b. New door (justified for reason other than cost effectiveness)		
40c. Door lock (new or replacement)		
40d. Door or door framing repair		
40e. Storm door		
40f. Other door treatments (specify:)		
Space-heating systems:		
41a. New space-heating system (justified because cost effective)		
41b. New space-heating system (justified for reason other than cost effectiveness)		
41c. Space-heating system repair (e.g., controls, safety items, flues)		
41d. Space-heating system tune-up		
41e. Vent damper		
41f. Intermittent ignition device		
41g. Other space-heating system modification (specify:)		
Air-conditioning systems:		
42a. New air conditioner (justified because cost effective)		
42b. New air conditioner (justified for reason other than cost effectiveness)		
Measure	Insta	illed by

	In-house crew	Contractor
Air-conditioning systems (continued):		
42c. Air conditioner repair		
42d. Air conditioner recharge/tune-up		
42e. Ceiling or whole-house fans		
42f. Other air-conditioning system modification (specify:)		
Ventilation:		
43a. Exhaust fan in bathroom		
43b. Exhaust fan in kitchen		
43c. Whole-house ventilation system		
43d. Other ventilation system improvements (specify:)		
HVAC accessories:		
44a. New programmable (setback) thermostat		
44b. New standard thermostat		
44c. Duct vents, grills, or registers		
44d. Standard air filter		
44e. High efficiency particulate arresting (HEPA) air filter		
44f. Other HVAC accessories (specify:)		
Water-heating system:		
45a. New water heater (justified because cost effective)		
45b. New water heater (justified for reason other than cost effectiveness)		
45c. Water-heating system repair		
45d. Water-heater tank insulation wrap		
45e. Pipe insulation		
45f. Low-flow showerhead		
45g. Faucet aerators		
45h. Water heater temperature reduction		
Measure	Insta	lled by

	In-house crew	Contractor
Water-heating system (continued):		
45i. Other water heating system measure (specify:)		
Other baseloads:		
46a. Indoor lighting		
46b. Outdoor lighting		
46c. Refrigerator (justified because cost effective)		
46d. Refrigerator (justified for reason other than cost effectiveness)		
46e. Other baseload measure (specify:)		
Client education:		
47a. Literature (e.g., brochures, booklets, and manuals)		
47b. Videos, DVDs, or compact disks (CDs)		
47c. Hardware kits and/or kits of weatherization materials		
47d. <5 minute total in-home education/discussion time per unit		
47e. 5-14 minute total in-home education/discussion time per unit		
47f. 15-29 minute total in-home education/discussion time per unit		
47g. 30-60 minute total in-home education/discussion time per unit		
47h. >1 hour total in-home education/discussion time per unit		
47i. Classroom training		
47j. Other client education approach (specify:)		
Other health, safety, and repair:		
48a. Smoke alarm		
48b. CO monitor		
48c. Attic ventilation		
48d. Roof repair		
48e. Ceiling repair		
48f. Wall repair		
Measure	Insta	lled by
	In-house crew	Contractor

Other health, safety, and repair (continued):	
48g. Floor repair	
48h. Foundation repair	
48i. Ground vapor barrier	
48j. Gutter or downspout (installed or repaired)	
48k. Grading of lot	
481. Plumbing repair	
48m. Sewer repair	
48n. Electrical repair	
480. Stair repair	
48p. Install/repair non-skid material on stairs	
48q. Install/repair safety gate at stairs	
48r. Install/repair grab bar in bathroom	
48s. Install/repair non-skid material in bathtub	
48t. Install/repair metal chimney liner	
48u. Lead abatement	
48v. Asbestos abatement	
48w. Removal or safe storage of household poisons	
48x. Other H&S and repair items (specify:)	

49. If a new space-heating system was installed, indicate the primary fuel used to heat the building during the winter after weatherization: *(check only one)*

- Natural gas
 Propane/LPG
 Kerosene (#1 fuel oil)
 Fuel oil #2
 Fuel oil #4
 Fuel oil #5L
 Fuel oil #5H
 Fuel oil #6
 Electricity
 Wood
 Coal
 Steam (purchased from a central distribution system)
 Hot water (purchased from a central distribution system)
 Other (specify: _____)
 Don't know
- □ Not applicable

50. If a new space-heating system was installed, indicate the type of *primary* space-heating system after weatherization: *(check only one)*

Central (ducted) warm-air furnace (forced-air or gravity, any fuel including electricity)
 Heat pump

Built-in electric units (e.g., electric baseboards, ceiling heat)

Steam or hot water system (e.g., floor or baseboard radiators, convectors)

Floor, wall, or pipeless (ductless) furnace (e.g., floor or wall furnace)

□ Room/space heater (nonportable)

□ Portable space heater

Cooking stove

🛛 None

Don't know

□ Not applicable

51. If a new space-heating system was installed and justified for reasons other than cost effectiveness, identify the reason it was replaced: *(check all that apply)*

Cost of repair/retrofit exceeded 50% of replacement cost

Existing heating system was not running

Existing heating system was old (e.g., at end of life, too old to be repaired/adjusted)

To switch fuel

To convert from a steam system to a hot water system

Heat exchanger was cracked

Boiler was leaking

Safety switches/controls were not operational and could not be repaired

To replace unvented space heater(s)

Existing heating system was not safe to run for other reason (specify: ______

Other (specify: _____

52. Please identify any cost-effective energy-efficiency measures (not repair or health and safety measures) recommended by your audit procedures that you were unable to install in this housing unit because of insufficient funds: *(check all that apply)*

☐ Air sealing ☐ Duct sealing ☐ Attic insulation □ Wall insulation ☐ Floor/foundation insulation □ Duct insulation □ New window(s) \Box Storm windows(s) \Box Door(s) \Box Storm door(s) □ New space-heating system ☐ Space-heating system tune-up \square New air conditioner(s) \square Air conditioner tune-up(s) □ HVAC thermostat □ New water heater □ Water heater insulation wrap U Water flow devices (e.g., showerheads, faucet aerators) ☐ Lighting □ Refrigerator Other: _____ □ None

53. If energy efficiency measures were checked in the previous question, provide a rough estimate of the cost for installing all the measures checked:

54. Please identify any repair or health and safety measures recommended by your audit procedures that you were unable to install in this building because of insufficient funds: *(check all that apply)*

New window(s) □ Window glazing(s) □ Window screen(s) \square Window lock(s) □ Window repair □ New door(s) Door lock(s) ☐ Door repair □ New space-heating system Space-heating system repair □ New air conditioner(s) ☐ Air conditioner repair \square Ceiling or whole-house fan(s) Exhaust fan(s) or ventilation system □ New water heater(s) □ Water-heating system repair □ Refrigerator(s) Smoke alarm(s) CO monitor(s) ☐ Attic ventilation Roof, wall, floor, or foundation repair ☐ Plumbing/sewer repair Electrical repair Other: □ None

55. If repair or health and safety measures were checked in the previous question, provide a rough estimate of the cost for installing all the measures checked: **\$____**

COSTS

Provide the costs associated with installing the measures in **THIS** building from all funding sources. Do **NOT** include any program management costs such as those associated with intake and eligibility determination, audits and house assessments, final inspections, contractor or crew management, and program administration. Also, do **NOT** include installation-related overhead costs such as those associated with vehicles, equipment, and training.

	In-House Crew	Contractor	Total
56a. Material costs			
56b. Labor costs ¹			
56c. Profit/overhead ²			
56d. Total ³			

¹Crew-based labor costs should be based on the crew's fully loaded hourly rate (rather than the crew's take-home pay rate) which may include costs associated with medical and other insurance, workers compensation, vacations, and other benefits. These labor costs should include the crew's time for traveling to and from the job site.

²If contractor profit and overhead are included in the contractor's material and labor costs, then leave these cells blank.

³If the contractor costs are not split out by material and labor, then just enter the total costs.

Divide the total costs spent on this building (cell in lower right corner of above table) into the following expenditure categories:

Expenditure category 57a. Cost effective energy-related measures (SIR > 1.0) 57b. Incidental repairs 57c. Health and safety, repairs, and other non-cost effective measures 57d. Total ¹57e. Labor and material Costs¹

Divide the total costs spent on this building (cell in lower right corner of the two above tables) into the following funding sources:

Funding source

Total funds

58a. DOE funds 58b. Non-DOE funds 58c. Total **Building Type Definitions:**

Single-family detached house—House that provides living space for one family or household, is contained within walls that go from the basement (or the ground floor, if there is no basement) to the roof, and has no walls that are shared (or built in contact) with another household. A manufactured house assembled on site is a single-family detached housing unit, not a mobile home.

Single-family attached house—House that provides living space for one family or household, is contained within walls that go from the basement (or the ground floor, if there is no basement) to the roof, has at least one wall that is shared (or built in contact) with an adjacent household, and has an independent outside entrance. An attached house is not divided into more than one housing unit and does not have a household living above or below another one within the walls extending from the basement to the roof to separate any adjacent units. Examples include a house that is a side-by-side duplex, part of a townhouse building, and a row house.

Mobile home—Home that is built on a movable chassis, is moved to the site, and may be placed on a permanent or temporary foundation. If rooms are added to the structure, it is considered a mobile home if the added floor area is less than the mobile home's original floor area; otherwise, it is a single-family detached house. A manufactured house assembled on site is a single-family detached house, not a mobile home.

Small multifamily—Building with two to four housing units (i.e., building that is divided into living quarters for two, three, or four families or households) in which one household lives above or beside another and does not meet the single-family attached house definition. Includes houses originally intended for occupancy by one family (or for some other use) that have since been converted to separate dwellings for two to four families. Typical arrangements in these types of living quarters are separate apartments downstairs and upstairs or one apartment on each of three or four floors.

Large multifamily—Building with five or more housing units (i.e., building that contains living quarters for five or more families or households) that does not meet the single-family attached house definition.

Shelter—Structure whose principal purpose is to house individuals on a temporary basis who may or may not be related to one another and who are not living in nursing homes, prisons, or similar institutional care facilities.