

Northwest Portable Classroom Project

New Construction Set-up Guidelines for the Pacific Northwest

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BUILDING AMERICA EFFICIENT PORTABLE CLASSROOM PROGRAM

NEW CONSTRUCTION SET-UP GUIDELINES FOR THE PACIFIC NORTHWEST

Purpose: To ensure the most energy-efficient operation of existing portable classrooms by providing effective and cost-effective envelope, air sealing and control measures. Implementation of these guidelines will help ensure lowest life cycle costs, maintain acceptable indoor air quality and comfort standards while providing a suitable learning environment.

These guidelines have been developed with support from the US Department of Energy's Building America Program partners and the Oregon Office of Energy, the Idaho Energy Division of the Department of Water Resources and Washington State University Energy Program.

Additional information is available at: <http://www.BAIHP.org>

Technical assistance regarding these guidelines is available from:

Washington State University Energy Program - Michael McSorley: (360) 956-2008

Idaho Department of Water Resources, Energy Division – Bob Minter: (208) 327-7970

Oregon Office of Energy – Betty Merrill/Justin Klure: (503) 373-1581

General: The classroom shall be inspected on site to determine compliance with these specifications and manufacturer's instructions and/or local codes. An on-site set up guideline checklist shall be used to meet the following specifications.

Damage Repair: Damage occurring to factory-installed energy measures during transportation and setup shall be corrected. Any disturbance of insulation due to wiring or other on-site work shall be corrected.

Marriage Line: The ceiling marriage line shall be sealed using gasket and non-porous silicon caulking, foam or closed cell backer rod.

Exception: The marriage line need not be sealed if the attic ventilation is provided through roof cap venting, using the rafter marriage line as the ventilation path. In such a situation, however, there must be a vapor barrier installed between the T-bar ceiling and the attic insulation.

The floor and wall marriage lines shall be inspected to insure integrity during shipping, and replaced or repaired as necessary.

Window and Door Frames: Window and door frames shall be installed and adjusted (if needed) according to the original equipment manufacturers instructions to minimize air leakage and water penetration. Windows and doors shall be tested to ensure that they open and close easily and seal tightly, and confirm weather-stripping is correctly installed.

Other Penetrations: All penetrations in the building envelope, such as for piping, wiring, recessed fixtures in walls and ceilings, and exhaust-fan housings shall be sealed.

Ground Cover: A vapor retarder, consisting of 6-mil black polyethylene or approved linear low-density poly, shall cover the ground throughout the entire crawl space. All joints shall be lapped at least 8 inches.

Crawl Space Ventilation: Crawl space ventilation shall meet all applicable state or local codes.

HVAC System:

If mechanical dampers are installed, they shall be opened to the 100% open position, or set to design specifications. A complete maintenance and operation manual shall be provided to the school facilities manager. The manager shall use this manual and keep records of M&O for each unit.