

PorterSIPs and the use of Water Resistive Barriers

PorterCorp recommends that a water resistive barrier, as recognized by the ICC, be installed over PorterSIPs used as exterior walls. The definition of a water-resistive barrier, from the International Residential Code (IRC) and the International Building Code (IBC) is:

WATER-RESISTIVE BARRIER: A material behind an exterior wall covering that is intended to resist liquid water that has penetrated behind the exterior covering from further intruding into the exterior wall assembly.

Unlike with conventional construction, SIPs do not require using a water resistive barrier to stop air infiltration. The water resistive barrier is strictly necessary as a drainage plain behind siding and flashing to protect the exterior OSB skin from liquid water damage.

Current ICC-ES Report holders for water-resistive barriers can be obtained by visiting the ICC-ES website at www.icc-es.org and navigating to Evaluation Reports, CSI List, Section 0728 - Water-Resistive Barriers.

The 2006 International Residential Code (IRC) requires the following:

SECTION R703 - EXTERIOR COVERING

R703.1 General: Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8. The exterior wall envelope shall be designed and constructed in a manner that prevents the accumulation of water within the wall assembly by providing a water-resistant barrier behind the exterior veneer as required by Section R703.2 and a means of draining water that enters the assembly to the exterior.....

R703.2 Water-resistive barrier: One layer of No. 15 asphalt felt, free from holes and breaks, complying with ASTM D226 for Type 1 felt or other approved water-resistive barrier shall be applied over studs or sheathing of all exterior walls.....

The 2006 International Building Code (IBC) requires the following:

SECTION 1403 - PERFORMANCE REQUIREMENTS

1403.2 Weather protection: Exterior walls shall provide the building with a weather resistant exterior wall envelope. The exterior wall envelope shall include flashing, as described in Section 1405.3. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistant barrier behind the exterior veneer, as described in Section 1404.2, and a means for draining water that enters the assembly to the exterior.

1404.2 Water-resistive barrier: A minimum of one layer of No. 15 asphalt felt, complying with ASTM D226 for Type 1 felt or other approved materials, shall be attached to the studs or sheathing, with flashing as described in Section 1405.3, in such a manner as to provide a continuous water-resistive barrier behind the exterior wall veneer.