



ZIP System Wall Sheathing Technical Bulletin Code Requirement for Water-Resistive Barriers

For years, many builders and home owners have recognized the important role that water-resistive barriers play in the construction of homes. As a secondary line of defense against water and air infiltration into the wall system, water-resistive barriers protect walls during construction as well as once the home is completed and siding is installed. The code bodies for residential construction are also placing a growing emphasis on the use of water-resistive barriers.

Effective January 2006, the International Residential Code (IRC) and International Building Code (IBC) have added code requirements for water-resistive barriers behind exterior sidings and veneers. The IRC requires water-resistive barriers in the construction of one and two family dwellings, and the IBC requires water-resistive barriers in the construction of multi-family and commercial buildings.

Sections R703.1, R703.2 and Table R703.4 of the IRC outline water-resistive barrier requirements for conventional one and two family dwelling construction, and section 1404.2 of the IBC outlines water-resistive barrier requirements for other construction types. In general, the code requires that the exterior walls provide a water-resistant envelope and be constructed so that water does not accumulate within the wall. This is accomplished by providing a weather-resistive barrier behind the exterior veneer.

The table below summarizes sheathing paper requirements for common siding materials based on the 2000, 2003, and 2006 IRC & IBC:

SIDING MATERIAL	Are Water-Resistive Barrier Required?					
	2000		2003		2006	
	IRC	IBC	IRC	IBC	IRC	IBC
Brick or Stone Veneer	Yes	Yes	Yes	Yes	Yes ¹	Yes
Vinyl	No	Yes	No	Yes	Yes	Yes
Wood	No	Yes	No	Yes	Yes	Yes
Fiber cement	No	Yes	Yes	Yes	Yes	Yes

¹ Requirement eliminated if 1 inch air space is provided between veneer and sheathing. This almost never occurs because of mortar spilling into cavity.

The information contained in table is intended as a general guide only does not include all possible installation scenarios.

As always is the case with codes, there are several exceptions. Key exceptions to the IRC include:

1. Detached accessory buildings do not require sheathing paper.
2. Sheathing paper is not required behind siding panels with shiplap joints or battens.
3. Sheathing paper is not required behind paperbacked stucco lath when the paper backing is an approved weather-resistive sheathing paper.