

DEPARTMENT OF LICENSES AND INSPECTIONS CODE BULLETIN OF INFORMATION No.B-0001 R1		CODE OF GENERAL ORDINANCES OF THE CITY OF PHILADELPHIA ----- TITLE 4 — BUILDING CONSTRUCTION AND OCCUPANCY CODE
SUBJECT OF BULLETIN: WATER RESISTANT GYPSUM BACKING BOARD		REFERENCE CODE SECTION(S): B-1210 B-2509.2
ISSUED BY		
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TITLE: Director of Planning and Code Development, Dept. of Licenses and Inspections		PAGE 1 OF 2

ISSUE:

The requirements for the installation of water-resistant gypsum board in bath and shower compartments are frequently overlooked due to the requirements for the surrounds located in Chapter 12 of the Building Code and the gypsum construction requirements located in Chapter 25. Installation of the wrong gypsum product can lead to rapid deterioration of the wall and ceiling surfaces.

DIRECTION:

The department’s building plan examiners and building inspectors are cautioned to apply the requirements of Section B-2509.2 of the building code to all rooms that contain bathtubs and/or showers. This section states:

“Glass mat water-resistant gypsum backing panels, discrete nonasbestos fiber-cement interior substrate sheets or nonasbestos fiber-mat reinforced cement substrate sheets... shall be used as a base for wall tile in tub and shower areas and wall and ceiling panels in shower areas. Water-resistant gypsum backing board shall be used as a base for tile in water closet compartment walls when installed in accordance with GA-216 or ASTM C 840 and manufacturer recommendations...”

ASTM C1396/C1396M covers water-resistant gypsum backing board to be used as a base for the application of ceramic or plastic tile on walls or ceilings,

ASTM C 840 covers the requirements for the methods of application and finishing of gypsum board including water-resistant gypsum backing board.

Water-resistant gypsum backing board consists of a noncombustible, water-resistant gypsum core, which is surfaced on both the face and back of the board with water-repellant paper bonded to the core. The water-repellant paper will maintain the integrity of the gypsum board assembly in areas subjected to damp conditions and moisture accumulation. The paper facing is commonly green tinted and frequently referred to as “green board.” This **“green board” is not a waterproof material** and will deteriorate if subjected to extended or repeated application of water. For this reason water-resistant gypsum backing board shall not be used in areas subject to continuous high humidity, such as saunas, steam rooms, gang showers, or indoor pools

There is also a Type X (special fire-resistant) water-resistant gypsum backing board available for use in assemblies requiring a fire-resistance rating. Whenever a fire-resistance rating is required, the gypsum board must extend to the floor behind all fixtures so the fire-resistance rating is continuous and the resulting constructed assembly duplicates that of the fire-tested assembly.

In cases where gypsum wallboard construction is being used, water-resistant gypsum backing board does not satisfy the requirement for nonabsorbent and waterproof materials required by Section B-1210. It is required as a substrate for those materials.

