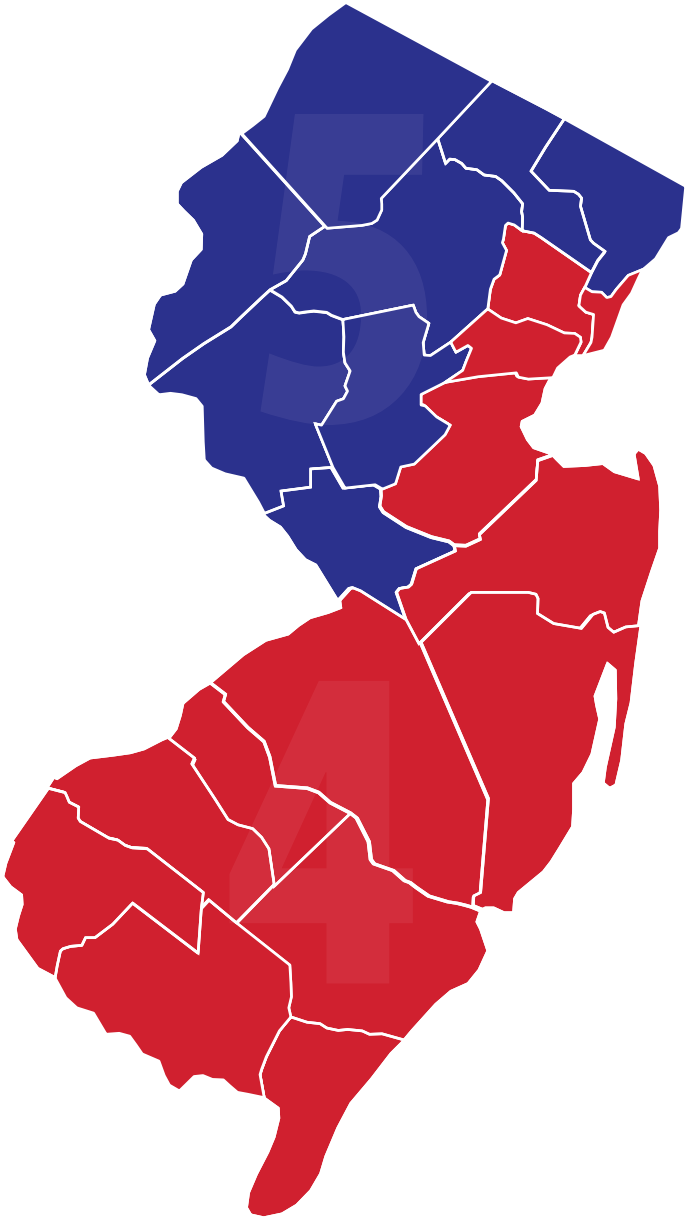
NORTHEAST PRECAST

2015 IRC/IECC BASEMENT COMPLIANCE NOTICE

Effective March 2016



An insulated basement becomes part of the **building thermal envelope**. This alone enables you to **NOT** insulate under the first floor and **NOT** insulate the hvac ducts in the basement.

Superior Walls® Xi X-TRA INSULATION™ Xi 15 X TRA INSULATION 15™

Learn more at **www.northeastprecast.com**

ZONE 4

BASEMENT INSULATION: R-10/13

R-10 is with continuous insulation and R-13 is for a stud wall cavity

FLOOR INSULATION: R-19

This is for floors over a basement with **NO** insulation

DUCT INSULATION: R-6

This for duct work in an **UNINSULATED** Basement

Zone 4: Use the Xi 12.5 wall system for continuous insulation value of R-12.5

ZONE 5

BASEMENT INSULATION: R-15/19

R-15 is with continuous insulation and R-19 is for a stud wall cavity

FLOOR INSULATION: R-30

This is for floors over a basement with **NO** insulation

DUCT INSULATION: R-6

This for duct work in an **UNINSULATED** Basement

Zone 5: Use the Xi-15 wall system for continuous insulation value of R-15.3

DEFINITION OF TERMS & CODE SECTIONS

[RE] CONDITIONED SPACE. An area, room or space that is enclosed within the building thermal envelope and that is directly heated or cooled or that is indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate through openings with conditioned spaces, where they are separated from conditioned spaces by unisulated walls, floor or ceilings, or where they contain uninsulated ducts, piping or other sources of heating or cooling.

[RE] CONTINUOUS INULATION (ci). Insulating material that is continuous across all structural members without thermal bridges other than fasteners and service openings. It is installed on the interior or exterior or is integral to any opaque surface of the building envelope.

[RE] BUILDING THERMAL ENVELOPE. The basement walls, exterior walls, floor, roof and any other building elements that enclose conditioned spaces.

N1102.29 (R402.2.9) BASEMENT WALLS. Walls associated with conditioned basements shall be insulated from the top of the basement wall down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Sections N1102.1.2 and N1102.2.8.

N1103.3.1 (R403.3.1) INSULATION (PRESCRIPTIVE). Supply and return ducts in attics shall be insulated to a minimum of R-8 where 3 inches (76.2 mm) in diameter and greater and R-6 where less than 3 inches (76.2 mm) in diameter. Supply and return ducts in other portions of the building shall be insulated to a minimum of R-6 where 3 inches (76.2 mm) in diameter and greater and R-4.2 where less than 3 inches (76.3 mm) in diameter. **Exception:** Ducts or portions thereof located completely inside the **building thermal envelope**.

INTERNATIONAL RESIDNTIAL CODE 2015, NEW JERSEY EDITION

Superior Walls® XSi™ X-TRA INSULATION XSi™ 15 X TRA INSULATION 15™

EXTRA STRENGTH. EXTRA INSULATION.

- **Provided with integral insulation R12.5 or R15.8**
- **5000+ PSI concrete reinforced with rebar and polypropylene fibers**
- **Insulated access holes for wiring and plumbing**
- **Meets Energy Conservation Code requirements for basement (IECC Chapter 4, IRC Chapter 11)**
- **Thermally isolated/insulated from exterior**
- **Insulated corners, studs and bond beam. No concrete exposed on interior.**
- **Monolithically poured = greater strength**
- **Galvanized steel stud facing**
- **Stud cavity allows for additional insulation**
- **No additional dampproofing required**
- **Precast openings for windows and doors**
- **Reduces building time**
- **Ready in virtually any weather**

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PCI NPCA CERTIFIED PLANT