



PINK Next Gen™ FIBERGLAS™ INSULATION

Guide Specification SECTION 07 21 16 Fiberglass Batt Insulation

SPECIFIER'S RESPONSIBILITY: This is a general specification guide, intended to be used by experienced construction professionals, in conjunction with good construction practice and professional judgment. This guide is to aid in the creation of a complete building specification that is to be fully reviewed and edited by the engineer. Sections of this guide should be included, edited, or omitted based on the requirements of a specific project. It is the responsibility of both the specifier and the purchaser to determine if a product or system is suitable for its intended use. Neither Owens Corning, nor any of its subsidiary or affiliated companies, assume any responsibility for the content of this specification guide relative to actual projects and specifically disclaim any and all liability for any errors or omissions in design, detail, structural capability, attachment details, shop drawings or other construction related details, whether based upon the information provided by Owens Corning or otherwise.

SECTION 07 21 16 FIBERGLASS BATT INSULATION

PART 1 — GENERAL

1.1 SUMMARY

- A. Section Includes: Fiberglass batt thermal insulation for exterior envelope assemblies.
- B. Related Sections:
 - 1. Section 07 21 00 - Mineral Wool Insulation.
 - 2. Section 07 21 18 - Glass Fiber Blanket Insulation.
 - 3. Section 09 81 16 - Acoustic Blanket Insulation.

1.2 SUBMITTALS

- A. Product Data: Submit product characteristics, performance criteria, and limitations, including installation instructions.
- B. Sustainable Design: Submit manufacturer's sustainable design certifications as specified with each product.

1.3 QUALITY ASSURANCE

- A. Sustainable Design: Provide products which have received the following certifications:
 - 1. UL Certified Environmental Product Declaration in accordance with ISO 14025. Applies to PINK Next Gen™ Fiberglas™ Insulation Faced and Unfaced insulation.
 - 2. GREENGUARD Indoor Air Quality Certified® and GREENGUARD Children & Schools CertifiedSM, applies to PINK Next Gen™ Fiberglas™ Insulation Unfaced Batts and PINK Next Gen™ Fiberglas™ Insulation Faced Batts and Rolls.
 - 3. GREENGUARD Formaldehyde Free, applies to PINK Next Gen™ Fiberglas™ Insulation Unfaced and PINK Next Gen™ Fiberglas™ Insulation Faced Batts and Rolls.
 - 4. Scientific Certification Systems SCS-MC-01025, SCS Certified minimum 65% recycled glass content (with at least 41% post-consumer recycled and the balance of pre-consumer recycled glass content), applies to PINK Next Gen™ Fiberglas™ Insulation Unfaced Batts and Rolls.
 - 5. Scientific Certification Systems SCS-MC-02676, SCS Certified minimum 58% recycled glass content (with at least 36% post-consumer recycled and the balance of pre-consumer recycled glass content), applies to PINK

Next Gen™ Fiberglas™ Insulation Faced Batts and Rolls.

- B. Mock-Up: If requested, provide a mock-up of materials proposed for use for review of workmanship. Accepted mock-ups may remain in place.
- C. Preconstruction Meeting: Convene a minimum of two weeks prior to commencing work of this section. Agenda shall include materials proposed for use, sequence of construction and coordination with installation of adjacent and covering materials

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to the job site in original packages, containers, or bundles bearing the brand name and manufacturer's identification.
- B. Storage: Store materials in dry locations with adequate ventilation, free from water, and in such a manner to permit easy access for inspection and handling.
- C. Handling: Handle using procedures recommended by the manufacturer for materials and personnel.

1.5 WARRANTY

- A. Warranty: Provide manufacturer's standard limited warranty against manufacturing defects.

PART 2 — PRODUCTS

2.1 MANUFACTURER

- A. Thermal Insulation: PINK Next Gen™ Fiberglas™ Insulation by Owens Corning Insulating Systems, Toledo, OH 43659; www.owenscorning.com.

2.2 MATERIALS

- A. PINK Next Gen™ Fiberglas™ Insulation Unfaced Batt Insulation: ASTM C 665, Type I, preformed formaldehyde free glass fiber batt type, unfaced. Includes Unfaced PINK Next Gen™ Fiberglas™, Unfaced PINK Next Gen™ Fiberglas™ Sonobatts® Insulation and PINK Next Gen™ Fiberglas™ Sound Attenuation Batts (SAB) Insulation.
 - 1. Noncombustible per ASTM E 136.
 - 2. Flamespread less than 25, smoke developed less than 50 per ASTM E84.
 - 3. ICC Building Code Construction Classification: All types.
 - 4. Water vapor sorption, Maximum by weight: not more than 5 percent.
- B. PINK Next Gen™ Fiberglas™ Insulation Kraft Faced Batt Insulation: ASTM C 665, Type II, Class C preformed formaldehyde free glass fiber batt type, Kraft paper faced one side. Includes Kraft faced PINK Next Gen™ Fiberglas™ Insulation, Kraft faced PINK Next Gen™ Fiberglas™ Sonobatts® Insulation and PINK Next Gen™ Fiberglas™ Insulation ProPink FastBatt Insulation
 - 1. ICC Building Code Construction Classification: III, IV, V.
 - 2. Perm Rating: 1 perm maximum per ASTM E96.
- C. PINK Next Gen™ Fiberglas™ Insulation Foil Faced Batt Insulation: ASTM C 665, Type III, Class C preformed formaldehyde free glass fiber batt type, foil faced one side.
 - 1. Flamespread less than 75, smoke developed less than 150 per ASTM E84.
 - 2. ICC Building Code Construction Classification: III, IV, V.
 - 3. Perm Rating: 0.5 perm maximum per ASTM E96.
- D. PINK Next Gen™ Fiberglas™ Flame Spread 25 Insulation: ASTM C 665, Type II (PSK facing), Class A and Type III (FSK facing), Class A preformed formaldehyde free glass fiber batt, poly/scrim/Kraft (PSK) or foil/scrim/Kraft (FSK) faced on one side.
 - 1. Flame spread less than 25, smoke developed index less than 50 per ASTM E84.
 - 2. ICC building construction classification: all types.
 - 3. Perm Rating: 0.5 maximum per ASTM E96.
- E. Accessories: Provide accessories per insulating system manufacturer's recommendations, including the following:

1. Tape: Polyethylene self-adhering type for Kraft faced insulation and bright aluminum self-adhering type for foil faced insulation.
2. Insulation Fasteners: Impale clip of galvanized steel; type recommended by insulation manufacturer for particular use intended.
3. Mechanical Insulation Fasteners: FM approved, corrosion resistant, size required to suit application.
4. Wire Mesh: Galvanized steel, hexagonal wire mesh.
5. Spindle Fasteners: Corrosion-resistant wire spindles.
6. Ventilation Baffles: Formed plastic, metal, or cardboard sized to fit full width of rafter spaces.

2.3 PERFORMANCE CRITERIA

A. Wood Frame Construction - Walls, R-Value: Per ASTM C518.

1. R-11, 3 1/2 inch (89mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 48 inch (1219mm) or 93 inch (2362mm) length.
2. R-13, 3 1/2 inch (89mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 48 inch (1219mm) or 93 inch (2362mm) length.
3. R-15, 3 1/2 inch (89mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 93 inch (2362mm) length.
4. R-19, 6 1/2 inch (159mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 48 inch (1219mm) or 93 inch (2362mm) length.
5. R-21, 5 1/2 inch (139mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 93 inch (2362mm) length.

B. Wood Frame Construction - Roof/Floor/Ceiling, R-Value: Per ASTM C518.

1. R-19, 6 1/2 inch (159mm) thickness, 15 inch (381mm) or 19-1/4 inch (489mm) or 23 inch (584mm) width, 48 inch (1219mm) or 93 inch (2362mm) length.
2. R-22, 6 3/4 inch (171mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 48 inch (1219mm) length.
3. R-25, 8 inch (203mm) thickness, 15 inch (381mm) or 23 inch (584mm) width, 48 inch (1219mm) length.
4. R-30C, 8 1/4 inch (209mm) thickness, 15-1/2 inch (394mm) or 23-3/4 inch (584mm) width, 48 inch (1219mm) length.
5. R-30, 10 inch (241mm) thickness, 16 inch (406mm) or 19-1/4 inch (489mm) or 24 inch (584mm) width, 48 inch (1219mm) length.
6. R-38C, 10 1/4 inch (260mm) thickness, 15-1/2 inch (394mm) or 23-3/4 inch (584mm) width, 48 inch (1219mm) length.
7. R-38, 12 1/4 inch (305mm) thickness, 16 inch (406mm) or 24 inch (584mm) width, 48 inch (1219mm) length.

C. Metal Frame Construction, R-Value for Batt Insulation: Per ASTM C518.

1. R-8, 2 1/2 inch (64mm) thickness, 16 inch (406mm) or 24 inch (609mm) width, 96 inch (2438mm) length.
2. R-11, 3 1/2 inch (89mm) thickness, 16 inch (406mm) or 24 inch (609mm) width, 48 inch (1219mm) or 96 inch (2438mm) length.
3. R-13, 3 1/2 inch (89mm) thickness, 16 inch (406mm) or 24 inch (609mm) width, 48 inch (1219mm) or 96 inch (2438mm) length.
4. R-15, 3 1/2 inch (89mm) thickness, 16 inch (406mm) or 24 inch (609mm) width, 96 inch (2438mm) length.
5. R-19, 6 1/2 inch (159mm) thickness, 16 inch (406mm) or 24 inch (609mm) width, 48 inch (1219mm) or 96 inch (2438mm) length.
6. R-21, 5 1/2 inch (139mm) thickness, 16 inch (406mm) or 24 inch (609mm) width, 96 inch (2438mm) length.

PART 3 — EXECUTION

3.1 EXAMINATION

- A. Examine the areas and conditions under which work of this section will be installed. Verify that adjacent materials are dry and ready to receive insulation. Verify mechanical and electrical services within walls

have been tested and inspected.

- B. Provide written report listing conditions detrimental to performance of work in this section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's installation instructions and ASTM C1320. Do not use unfaced insulation in exposed applications where there is potential for skin contact and irritation. Kraft and standard foil facings will burn and must not be left exposed. The facing must be installed in substantial contact with the unexposed surface of the ceiling, wall or floor finish. Protect facing from any open flame or heat source.
- B. Friction-fit blanket insulation in place, until the interior finish is applied. Install batts to fill entire stud cavity, with no gaps, voids, or areas of compression. If stud cavity is less than 8 feet in height, cut lengths to friction fit against floor and ceiling tracks. Walls with penetrations require that insulation be carefully cut to fit around outlets, junction boxes, and other irregularities.
1. Do not install insulation on top of or within 3 inches of recessed light fixtures unless the fixtures are approved for such use.
- C. In crawl spaces and where the underside of floors are exposed to unconditioned space, insulation shall fill the cavity or be installed in contact with the underside of the decking. If vapor retarder is required by local code, a Kraft vapor retarder must be in contact with a 15-minute thermal barrier, typically on the bottom side of the insulation.
- D. Within exterior wall framing, install insulation between pipes and backside of sheathing. Cut or split insulation material as required to fit around wiring and plumbing.
- E. Where showers and bathtubs are located on exterior walls, typically install insulation and vapor retarder between units and exterior.
- F. If eave ventilation baffles are required, install ventilation baffles at eaves to hold insulation down from roof sheathing and provide positive ventilation from eave to attic space.
- G. Fluff insulation to full thickness for specified R-value before installation. Do not compress insulation in the cavity during installation, creating gaps or voids that could diminish thermal value.
- H. Trim insulation neatly to fit spaces. Fill miscellaneous gaps and voids with insulation.
- I. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation.
- J. For unfaced batt insulation, install with friction fit or retain in place with manufacturer's recommended fasteners or mesh.
- K. For batt insulation with factory-applied facing, install with vapor retarder membrane facing warm in the winter side of building spaces or as specified by local building code. Lap ends and side flanges of membrane over or between framing members. Tape to seal tears, cuts or misalignments in membrane.
- L. Secure insulation in place using one of the following methods: Friction fit; staple or nail facing flanges in place as needed, tape in place, retain in place with spindle fasteners, retain in place with wire mesh secured to framing members.

3.3 PROTECTION

- A. Protect installed insulation from damage due to weather and physical abuse until protected by permanent construction.

End of Section 07 21 16