



Formaldehyde-Free™ Fiber Glass Insulation Enhanced with Bio-Based Binder

FSK-25 FACED PANEL DECK



PRODUCT DATA SHEET

COMPANY

Johns Manville is committed to creating more comfortable, healthier and energy-efficient indoor environments. We revolutionized the building insulation industry by pioneering the development of Formaldehyde-free™ fiber glass building insulation over a decade ago. We continue to build on our legacy of innovation with a new Formaldehyde-free™ fiber glass insulation solution that utilizes an innovative bio-based binder, made mostly with rapidly renewable plant-based materials, that offers excellent thermal and acoustical performance as well as improved handling, easier cutting and less dust than our previous product. At JM, we believe that in every detail, materials matter.

DESCRIPTION

Johns Manville FSK-25 faced panel deck insulation is a lightweight flame-resistant thermal and acoustical fiber glass insulation made of long, resilient glass fibers bonded with a bio-based binder. The batts are laminated with an FSK-25 (foil-scrim-kraft) facing, which enables the insulation to carry a fire hazard classification rating of 25/50 or less per ASTM E84 and also serves as an excellent vapor retarder. FSK-25 faced panel deck insulation may be left exposed where codes permit. Extra-wide tabs extend full length along both sides for Modular Roof Deck applications.

AVAILABLE FORMS

- Pre-cut batts

USE

- 2' x 4' (0.61 m x 1.22 m) modular roof construction – commercial buildings
- Building systems where extended tabs assist in application

INSTALLATION

2' x 4' Modular Roof Deck

- Step 1: Position the first folded tab to be stapled on the inside face of the longitudinal wood member and staple it 1/2" (13 mm) up from the exposed, narrow face of the 2' x 4' (0.61 m x 1.22 m) module. Space staples 6" (152 mm) apart the entire length of the tab, with a staple within 1" (25 mm) of each end of the folded tab. Make certain that the staples are installed with the width dimension parallel to the 93" (2.36 m) or 46 1/2" (1.18 m) long side of the batts.
- Step 2: Position the batt into the cavity and pull the second folded tab across the face of the adjoining framing member. Staple the tab to the near side of the second framing member while holding the tab in alignment parallel to the deck. Maintain fullest "drape" on each tab to ensure sufficient space above the facing to permit the batt to recover to its full thickness.
- Step 3: In the second module, double layer the tab of the next batt against the stapled tab of the first batt, and repeat steps 1 and 2.

In applications where framing is not present, it may be attached to the underside of steel or wood roof decks using impaling pins and washers (in which case, adjacent tabs are folded together and stapled for a continuous vapor retarder).

PACKAGING

FSK-25 faced insulation is compression-packaged for savings in storage and freight costs.



PERFORMANCE ADVANTAGES

Formaldehyde-free: will not off-gas formaldehyde in the indoor environment.

Thermal Efficiency: provides effective resistance to heat transfer with R-values up to R-30 (RSI-5.3).

Sound Control: reduces transmission of sound through exterior and interior walls and floor or ceiling assemblies.

Fire Resistant: see Specification Compliance.

Durable Inorganic Glass: will not rot, mildew or deteriorate and is noncorrosive to pipes, wiring and metal studs.

Superior Performance: bonded glass fibers are dimensionally stable and will not slump, settle or break down during normal applications.

Light Reflective: reflective surface helps maximize lighting efficiency and may reduce lighting requirements.

ENERGY AND ENVIRONMENT





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DESIGN CONSIDERATIONS

In colder climate areas, vapor retarders (whether attached to the insulation or applied separately) are often placed toward the heated or conditioned side of the wall. This is done to reduce water vapor penetration into the wall from the building interior. Check your local building codes for vapor retarder requirements.

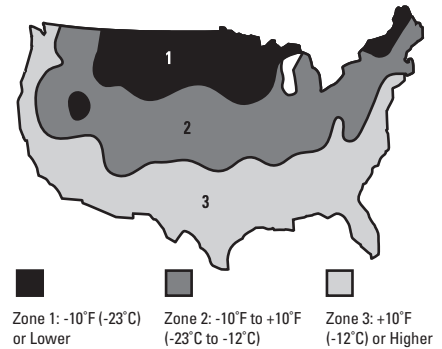
Refer to JM guide specifications for further design considerations and required installation instructions.

HUMIDITY RECOMMENDATIONS

| WINTER MEDIUM OF ANNUAL EXTREMES | MAXIMUM ALLOWED INDOOR RELATIVE HUMIDITY AT 70°F (21°C) (CONSTANT) | MAXIMUM ALLOWED INDOOR RELATIVE HUMIDITY DAYTIME (INTERMITTENT) |
|---|--|---|
| Zone 1: -10°F (-23°C) or Lower | 30% | 40% |
| Zone 2: -10°F to +10°F (-23°C to -12°C) | 35% | 45% |
| Zone 3: +10°F (-12°C) or Higher | 45% | 50% |

If the indoor relative humidity exceeds the maximums above, the building must be ventilated or other steps taken to reduce the humidity to the recommended levels.

If it is not practical to meet these humidity recommendations, do not use the Panel-Deck insulation system.



APPLICABLE STANDARDS & BUILDING CODE CLASSIFICATION*

| JM FSK-25 FACED BATTS |
|--|
| ASTM C665, Type III, Class A, Category I |
| IBC, ALL TYPES |

*JM insulations comply with IBC (International Building Code), model code requirements for building construction types listed above.

STANDARD SIZES*

| FACING | R-VALUE (hr•ft ² •°F/Btu) | RSI VALUE (m ² •°C/Watts) | THICKNESS** in (mm) | WIDTH† | |
|----------------------------|---|---|------------------------|-----------------------|----------------------|
| | | | | METAL FRAMING in (mm) | WOOD FRAMING in (mm) |
| FSK-25 Faced Panel Deck | 19 | 3.3 | 6½ (165) | | 23 (584) |
| | 30 | 5.3 | 10¼ (260) | 24 (610) | |

*Consult your local JM sales representative or product availability chart for other available sizes and R-values (RSI-values).

†Special widths and lengths may be available. Check with your local JM sales representative. Standard product lengths include 48" and 93" (1,219 mm and 2,362) batts.

PHYSICAL PROPERTIES*

| PRODUCT | FLAME SPREAD | SMOKE DEVELOPED | VAPOR RETARDER (PERMS) | WATER VAPOR SORPTION | DIMENSIONAL STABILITY |
|----------------------------|--------------|-----------------|------------------------|----------------------|-----------------------|
| FSK-25 Faced Panel Deck | < 25 | < 50 | 0.05 | Less than 5% | Less than 0.1% |

*Products are tested in accordance: R-value ASTM C518 | Surface Burning Characteristics ASTM E84 | Perm Rating ASTM E96

FSK-25 facing can be left exposed where code permits. Keep open flame and other heat sources away from facing. Do not place insulation within 3" of light fixtures or similar electrical devices unless device is labeled for contact with insulation. Do not use insulation in spaces around metal chimneys, fireplaces, or flues. See package for warnings, fire hazard and installation instructions, or call 1-800-654-3103.

Visit our website at www.JM.com or call **800-654-3103** | Building Insulation Division P.O. Box 5108 | Denver, CO 80217-5108

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of thermal and acoustical fiber glass insulation listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the sales office nearest you for current information. All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy or for information on other Johns Manville thermal and acoustical insulation and systems, visit the website or call the 800 number above.

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