



Formaldehyde-free™ Fiber Glass Insulation

JM FORMALDEHYDE-FREE™ FIBER GLASS INSULATION

JM Formaldehyde-free™ fiber glass building insulation offers superior thermal and acoustical performance—and it improves indoor air quality, because it's made without formaldehyde. Why is that important? Because the U.S. Environmental Protection Agency (EPA) recommends limiting exposure to formaldehyde as much as possible, and the California Air Resources Board, a division of the California EPA, recommends that homeowners, builders and architects use building materials and insulation made without formaldehyde when building a home or remodeling. JM is the only company in the industry with a complete line of Formaldehyde-free™ fiber glass building insulation. Visit JM.com/formfree for more information.

PRODUCT DESCRIPTION

Johns Manville ComfortTherm poly-encapsulated thermal and acoustical fiber glass insulation is lightweight and made of long, resilient glass fibers bonded with an acrylic thermosetting binder. ComfortTherm is wrapped in plastic for more comfortable installation with less itch and dust. The product is available with a vapor-retarder plastic facing, and also with a plastic facing that does not act as a vapor retarder, for use in hot, humid climates.

AVAILABLE FORMS

- Pre-cut batts – fit standard wall cavities and are faster to install than roll products.
- Rolls – can be cut to fit any size wall cavity and installed in any part of a building—especially useful for long, unobstructed areas such as attics or crawl spaces.

APPLICATIONS

ComfortTherm insulation carries a Class A rating (ASTM C 665) for low flame spread and has been classified FHC 25/50 by Underwriters Laboratories, meaning it can be used for some exposed (not covered by gypsum wallboard) applications where permitted by the local building code. See National Evaluation Service, Inc. (NES) Report No. NER-549 – copies available upon request. Under some conditions, even low flame spread material can burn at a slow rate if exposed to an open flame or other heat sources. Do not use ComfortTherm insulation where encapsulation film will be exposed to sunlight or mechanical abuse.

New Construction

- Wood frame construction – residential homes and light commercial buildings
- Metal frame construction – commercial buildings
- Pre-manufactured homes – modular or manufactured housing
- Suspended ceiling systems – sized to fit above 2 x 4 ceilings
- Interior wall sound control – interior walls and floor and ceiling assemblies (For sound class ratings for wall assemblies, see the appropriate STC values datasheet for either steel or wood framing.)

Retrofit

- Re-insulating attics (R-25 only) and crawl spaces
- Back-fill above suspended ceiling systems

INSTALLATION

ComfortTherm batts are sized to fit standard cavities. You can cut JM ComfortTherm insulation easily with an ordinary utility knife to fit nonstandard cavities, and install it by simply pressing in place between studs or joists. You can secure the insulation by stapling the flanges to wood studs. ComfortTherm is also available in a reverse-flange underfloor configuration with the vapor retarder toward the floor.

Note: In colder climates, 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. The plastic facing of standard ComfortTherm is a vapor retarder. In predominantly hot, humid climates, many codes make vapor-retarder use optional. ComfortTherm with a non-vapor-retarder facing is available for these areas. Check your local building code for vapor-retarder requirements.

PACKAGING

ComfortTherm insulation is compression-packaged for savings in storage and freight costs.

RECOMMENDED STORAGE AND TRANSPORT

Store insulation indoors. Keep insulation clean and dry at all times. When transporting, cover completely with a waterproof tarpaulin as necessary.

ComfortTherm®

**Poly-encapsulated Formaldehyde-free
Thermal and Acoustical Fiber Glass Insulation**



PERFORMANCE ADVANTAGES

- Improves indoor air quality – because it's made without formaldehyde.
- Poly-encapsulated – wrapped in plastic for cleaner, more comfortable installation with less itch and dust.
- Thermally Efficient – provides effective resistance to heat transfer with R-values up to R-38 (RSI-6.7).
- Acoustically Efficient – reduces transmission of sound through exterior and interior walls and floor/ceiling assemblies.
- Fire-resistant and Noncombustible – (see Specification Compliance). ComfortTherm insulation can be left exposed where building codes permit.
- Effective at Controlling Moisture – the plastic facing is a vapor retarder that resists water vapor transmission. ComfortTherm is also available with a plastic facing that does not act as a vapor retarder, for use in hot, humid climates.
- Noncorrosive – does not accelerate corrosion of pipes, wiring or metal studs.
- Mold-resistant – does not support mold or mildew. Does not supply a food source for insects or rodents.
- Resilient – bonded glass fibers will not pull apart during normal applications and resist settling, breakdown and sagging from vibration.
- Flexible – forms readily around corners and curved surfaces.

Poly-encapsulated Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation

BUILDING CODE COMPLIANCE AND FIRE HAZARD CLASSIFICATION

	ICBO	SBCCI	BOCA	IBC/IRC	Flame Spread*	Smoke Developed*
ComfortTherm	All Types	All Types	All Types	All Types/All Types	25	50

*Per ASTM E 84.

AVAILABLE FORMS*

Specification Compliance	R-value (hr.ft ² .°F/Btu)	RSI-value (m ² .°K/Watts)	Thickness**		Width***			
			(in)	(mm)	Metal Framing (in)	Wood Framing (in)	Metal Framing (mm)	Wood Framing (mm)
ASTM C 665	38c	6.7	10¼	260		15½, 23¾		393, 398
Type II	30	5.3	10¼	260	16, 24	16, 24	406, 610	406, 610
Class A	25	4.4	8¼	210		15 ^{ΔΔ} , 23		381, 584
Category 1 or 2†	21	3.7	5½	140		15		381
	19	3.3	6½	165	16, 24 ^Δ	15 ^{ΔΔΔ} , 23	406, 610	381, 584
	13	2.3	3½, 3¾	89, 92	16	15	406	381
	11	1.9	3½, 3¾	89, 92	16, 24	15, 23	406, 610	381, 584

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

** Thickness may vary by producing location.

*** Special widths and lengths may be available. Check with your local sales representative. Standard product lengths include 48, 93 and 96 inch batts.

† Standard ComfortTherm is Category 1 (vapor retarder). R-25 and non-vapor retarder ComfortTherm for hot and humid climates (available in R-11, 13, 19 and 30) are Category 2.

Δ For above suspended ceiling.

ΔΔ For attic re-insulation. Encapsulation film is perforated on face and back.

ΔΔΔ For under floor wood framing.

SPECIFICATION COMPLIANCE

ASTM C 665, Type II, Class A, Category 1 (R-25 is Category 2, not classified as a vapor retarder)

ASTM E 96 Permeability; vapor retarder facer films on standard product: 0.5 Perms. Perforated backer film and perforated facer film on R-25 attic insulation and products for hot, humid climates (available in R-11, 13, 19 and 30): 10 Perms.

UL File R3711

ASTM E 84 Flame Spread 25 or less, Smoke Developed 50 or less

SHORT FORM SPECIFICATION

All insulation shown on drawings or specified herein shall be "Johns Manville ComfortTherm Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation." Thermal resistance "R" (RSI) values of the insulation shall be R (RSI) _____ in ceilings, R (RSI) _____ in walls, and R (RSI) _____ in floors over unheated spaces. The product shall have an FHC rating of 25/50 or less.

LIMITATIONS OF USE

Check applicable building codes.



Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of ComfortTherm poly-encapsulated 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, call or write to the 800 number or address listed below.

Properly insulating a structure using Johns Manville building insulation helps preserve our environment by reducing energy consumption for heating and cooling, reducing the pollution resulting from fuel burning, reducing the emission of hazardous air pollutants during manufacturing and reducing waste through the utilization of recycled materials. Look for the cross and globe emblem on Johns Manville building insulation which indicates independent certification by Scientific Certification Systems, Inc. of 25% or more recycled glass content.



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