

OWENS-CORNING FIBERGLAS

Owens-Corning Fiberglas Corporation has long been a supplier of quality insulation products for the heating, ventilating and air conditioning industry. The selection guide below illustrates

OWENS-CORNING INSULATION SELECTION GUIDE TOLEDO 1, OHIO

the broad range of products designed specifically for nearly every mechanical equipment insulation requirement. Additional information and complete product specifications are available from any Owens-Corning Fiberglas Corporation branch office or authorized distributor.

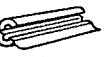
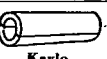
DUCT INSULATIONS

TYPE	USE	FACINGS FACTORY-APPLIED	OPERATING TEMPERATURE
 Semirigid	Semirigid board type duct insulations for all types of heating, ventilating, air conditioning and dual-temperature duct systems. Available with a variety of facings for appearance and for functional use.	Plain (no facing) for heating ducts Coated for heating ducts Vapor barrier for cooling or dual-temperature ducts with asphalt adhered kraft paper (SF) or fire-retardant embossed foil (PF)	To 250 F To 250 F SF to 150 F PF to 250 F
 Flexible	Resilient, flexible insulating blankets in rolls for insulating round and rectangular duct work and fittings. Available with a variety of facings for appearance and for functional use.	Plain (no facing) for heating ducts Vapor barriers: Aluminum foil 0.001 in.; 0.002 in. thick; 0.004 in. grey vinyl film; 30-30-30 duplex kraft; reinforced foil and kraft laminate. Joint flange overlaps furnished.	To 250 F

DUCT LINERS

 Semirigid	Semirigid PF board type acoustical insulation liner for absorbing duct system noise. One or both sides are coated to reduce air friction loss and bind surface fibers. Also insulates thermally.	Fire-retardant Neoprene coating	To 250 F Velocities to 6000 fpm
 Flexible	A sound-absorbent, mat-faced, flexible duct liner for rectangular or round duct systems. The smooth mat-faced surface reduces air flow resistance to a minimum and virtually eliminates the possibility of fiber air erosion.	Glass mat facing bonded to insulation	To 250 F

PIPE INSULATIONS

TYPE	USE	JACKET	OPERATING TEMPERATURE
 PF	With a variety of factory-applied jackets this universally used pipe insulation insulates all types of pipe and tubing from subzero to 450 F.	Universal Dual-Temperature Canvas Flame-Retardant Vapor Barrier Roofing Felt	-120 F to 450 F
 O-C Flexible Tubing Insulation	A molded foamed plastic insulation for iron pipe and copper tubing cooling and heating lines, chilled water and refrigerant lines.	None	0 to 200 F
 One-Piece	One-piece is a new addition to the Fiberglas line of pipe coverings. It has multipurpose use for all types of piping, is lightweight and easy to apply.	Same as PF	-30 F to 400 F
 Kaylo	Kaylo pipe and block insulation is a hydrous calcium silicate insulating material for heating lines and equipment operating at temperatures up to 1800 F.	Canvas—Standard Weight 6 and 8 oz	Standard Kaylo Up to 1200 F Kaylo-20 Up to 1800 F

EQUIPMENT INSULATIONS

TYPE	TYPE	USE	FACING	OPERATING TEMPERATURE
 PF	Fiberglas PF equipment insulation is a highly versatile and efficient insulating material. Made in a wide range of thicknesses and densities to meet most requirements.	Heating and cooling equipment	Field-Applied	Up to 400 F
 Metal Mesh Blankets	Fiberglas metal mesh blankets are made with unbonded fibrous glass faced on one or both sides with wire mesh or metal lath. They conform readily to irregular shapes.	Heating equipment insulation	Available with a variety of mesh or lath facings to receive surface finish.	Up to 1000 F

OWENS-ILLINOIS

General Offices. Toledo 1, Ohio

GLASS BLOCK, TOPLITE PANELS, THINLITE CURTAIN WALLS

THREE PRODUCTS

GLASS BLOCK PANELS. Owens-Illinois Glass Block are hollow, hermetically sealed glass units containing a $\frac{3}{4}$ vacuum. They are laid in mortar to form light-transmitting panels in vertical walls. Owens-Illinois Glass Block provide quality-controlled daylighting by glass areas which reduce heat loss, surface condensation and infiltration in cold weather and heat gain in warm weather.

TOPLITE PANELS. Owens-Illinois Toplite Panels are made of hollow, partially evacuated and hermetically sealed glass units, prefabricated at the factory into panels of insulated aluminum-grid construction. Used horizontally in roofs, Toplite Panels offer controlled daylighting with reduced heat loss, surface condensation and solar heat gain.

THINLITE CURTAIN WALL. is a complete curtain wall system for the enclosure of buildings of all kinds. The wall consists of a variety of factory fabricated panels and windows in modular width and heights and the necessary metal parts. Thinlite glass panels are made in a variety of designs and colors. All designs provide good thermal insulation by reason of their double glazed and double gasketed construction with a minimum of through metal. The solar-selecting designs provide good daylight control and low solar heat transmission.

THERMAL INSULATION. The coefficients of heat transmission 'U' for panels of O-I Glass Block and Toplite are as follows:

Size of Block	U (Btu/sq ft/hr/F Temp Difference)
5 1/4 in. sq	.60
7 1/4 in. sq	.56
7 1/4 in. sq with Glass Fiber Insert	.48
11 1/4 in. sq	.52
11 1/4 in. sq with Glass Fiber Insert	.44
Toplite Panels	.58
Thinlite Panels	.60

See page 133 in this GUIDE for additional U-Factors applicable to Owens-Illinois Glass Block.

SURFACE CONDENSATION. Because of the low over-all, air-to-air heat transfer, the exterior air temperatures which will produce condensation on O-I Glass Block, Toplite, and Thinlite Panels are much lower than those for single glass. This permits higher humidities to be maintained where needed for winter air conditioning for comfort or for industrial processes.

INFILTRATION. Panels of glass block which are laid in mortar provide a barrier against infiltration. Dusts, drafts, and

air and vapor leakage are minimized. Natural ventilation requirements can be met by installing windows in glass block panels.

SOLAR HEAT GAIN. Complete instantaneous solar heat gain data applicable to Owens-Illinois Glass Block and Toplite designs for all exposures are given on Pages 202 through 204 of this Guide. The O-I design numbers which compare with the ASHAE type numbers are as follows:—

ASHAE Type No.	O-I Block Design Nos.
I	307, 316, 330, 331, 370
II	340
III	340 with Fiberglas Insert
IVA	365
V	363
VI	Toplite Panels

New O-I glass design #80 solar-selecting white and #80 solar-selecting green are available in masonry Glass Block and Thinlite Panels. They have a lower solar heat gain than any of those shown in THE GUIDE. The solar-selecting design has a variable rate of solar energy transmission depending on sun altitude. When the solar energy is maximum on the exterior of the wall, the #80 design has a minimum transmission. Calculated values of solar heat gain for these blocks and Thinlite Panels are now available.

Solar heat gain through Toplite panels is much less than that through single glass or plastic skylights, due to their solar-selecting characteristics. They act as a mirror in reflecting a high percentage of the solar energy when the sun is at high altitudes as in the spring and summer months.

DESIGN AND SIZES. Owens-Illinois Glass Block are made in a variety of face designs and in three standard sizes (5 1/4 in. sq, 7 1/4 in. sq, and 11 1/4 in. sq—all three are 3 1/4 in. thick). Mortar joints of 1/4 in. thickness are recommended.

Prefabricated Toplite Panels are available in seven standard sizes: 2 x 2, 3 x 3, 4 x 4, 2 x 6, 3 x 6, 4 x 5, 5 x 5—all are 3 1/4 in. thick. Prefabricated Thinlite panels are available in two modular widths, 4 feet and 5 feet, and in two modular heights of 2 feet and 1 foot. Modular windows in four standard heights, and insulated metal panels are also available. Complete technical data, description and details will be gladly sent. Write: Kimble Glass Company, subsidiary of Owens-Illinois, Department HV, P. O. Box 1035, Toledo 1, Ohio.