# Insulation Board with ECOSE® Technology

#### Description

Knauf Insulation Insulation Board is a thermal and acoustical insulation product bonded with ECOSE® Technology. It is available plain or with a FSK facing,

### **ECOSE®** Technology

ECOSE® Technology is a revolutionary binder chemistry that enhances the sustain-ability of our products. The "binder" is the bond that holds our glass mineral wool product together and gives the product its shape and brown color. ECOSE® Technology is a plant-based, sustainable chemistry that replaces the phenol/formaldehyde (PF) binder traditionally used in glass mineral wool products. Products using ECOSE® Technology are formaldehyde-free and have reduced global warming potential when compared to our products of the past.

Features	and	<b>Benefits</b>
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- Excellent thermal efficiency results in lower operating costs
- Lightweight, easy to handle and fabricate
- Fast, easy installation lowers labor costs
- Low emitting for indoor air quality considerations
- Excellent acoustical properties effectively reduce noise
- FSK, PSK, and ASJ+ vapor-retardant facings provide a neat finished appearance

#### Indoor Air Quality

- UL Environment certified
- UL Environment GREENGUARD Gold certified
- UL Environment validated to be formaldehyde free

DUCTS AND PLENUMS:

 Use of 3.0 pcf (48 kg/m3) insulation board in concealed areas is recommended.

## Sound Absorption Coefficients (ASTM C 423, Type A Mounting)

				Octave Band Center Frequency (cycles/sec.)						
Туре	Facing	Th	ickness	125	250	500	1000	2000	4000	NRC
3.0 PCF (48 kg/m <sup>3</sup> )	Plain	1"	(25 mm)	.08	.23	.62	.88	.96	.99	.65
		1½"	(38 mm)	.09	.39	.89	1.03	1.06	1.01	.85
		2"	(51 mm)	.29	.65	1.11	1.13	1.06	1.03	1.00
		3"	(76 mm)	.54	1.01	1.18	1.07	1.07	1.04	1.10
		4"	(102 mm)	.95	1.11	1.17	1.07	1.07	1.06	1.10
	FSK	1"	(25 mm)	.21	.63	.84	.93	.51	.22	.75
		1½"	(38 mm)	.45	.60	.99	.73	.53	.27	.70
		2"	(51 mm)	.67	.77	.93	.74	.47	.28	.75
	ASJ	1"	(25 mm)	.15	.71	.65	.82	.41	.16	.65
		1½"	(38 mm)	.42	.55	.91	.69	.40	.23	.65
		2"	(51 mm)	.75	.71	.80	.66	.41	.24	.65

Density (LB)	Thickness	<b>R-Value</b>	(R-SI)	
3.0 (48 kg/m³)	1" (25 mm)	4.3	(0.8)	
	1 <sup>1</sup> /2" (38 mm)	6.5	(1.1)	
	2" (51 mm)	8.7	(1.5)	
	21/2" (64 mm)	10.9	(1.9)	
	3" (76 mm)	13.0	(2.3)	