

2015 IECC R-12 Duct Insulation Requirements

In 2015, the **International Energy Conservation Code (IECC)** made a change to the thermal resistance requirements for duct insulations in unconditioned spaces. Specifically, the code called for ducts in unconditioned spaces in climate zones 5-8 to be insulated with R-12 insulation.¹ (Please see the complete code for all details and any exceptions.)

Climate zones 5-8 are in the middle to northern part of the country, and they often experience much colder weather patterns than zones 1-4. As a result, ducts in unconditioned spaces in climate zones 5-8 have typically required much more energy to maintain consistent temperatures. The IECC introduced the R-12 code change in an effort to address the inefficiencies of these types of duct systems in these regions.

To meet these new code requirements, Johns Manville is now offering two different R-12 duct liners: flexible R-12 Linacoustic® RC duct liner and rigid R-12 Linacoustic® R-300 duct liner. Both materials maintain the performance characteristics of their respective product lines, including a coated glass-mat surface and flame attenuated manufacturing technology.

Linacoustic RC Thermal Performance

Thickness		R-Value		Conductance	
In	Mm	(hr•ft ² •°F)/Btu	M ² •°C/W	BTU/(hr•ft ² •°F)	W/m ² •°C
½	13	2.2	0.39	0.46	2.61
1	25	4.2	0.74	0.24	1.36
1½	38	6.3	1.11	0.16	0.91
2	51	8.0	1.41	0.13	0.74
3	76.2	12.0	2.11	0.08	0.47

Linacoustic R-300 Thermal Performance

Thickness		R-Value		Conductance	
In	Mm	(hr•ft ² •°F)/Btu	M ² •°C/W	BTU/(hr•ft ² •°F)	W/m ² •°C
1	25	4.3	0.76	0.23	1.31
1½	38	6.3	1.11	0.16	0.91
2	51	8.7	1.53	0.12	0.68
3	76.2	13.0	2.34	0.08	0.43
4	101.6	17.4	3.13	0.06	0.32

For more information on these products, please [click here](#).

¹ 2015 IECC - C403.2.9 – Duct and Plenum Insulation & Sealing