Roof Deck Insulation Compression Strengths

Insulation Type	Unit Weight	Compressive Strength
Expanded Polystyrene	1.0 pcf	10 to 14 psi
	1.25 pcf	13 to 18 psi
	1.5 pcf	15 to 21 psi
	2.0 pcf	25 to 33 psi
Extruded Polystyrene	1.3 to 4.1 pcf	12 to 60 psi
Glass Fiber/Mineral Fiber	10 to 15 pcf	10 psi
Cellular Glass	8.5 pcf	100 psi
Fiberboard		12 to 18 psi
Perlite	10 to 13 pcf	35 to 40 psi
Polyisocyanurate		10 to 25 psi

Source: National Roofing Contractors Association, Commercial low -Slope Roofing Materials Guide,

1994 Edition

Abbreviations: psi. pounds per square inch pcf: pounds per cubic foot