

Thermal Break Pads

Armatherm™ Grade FR - Ultra High Strength, High Performance



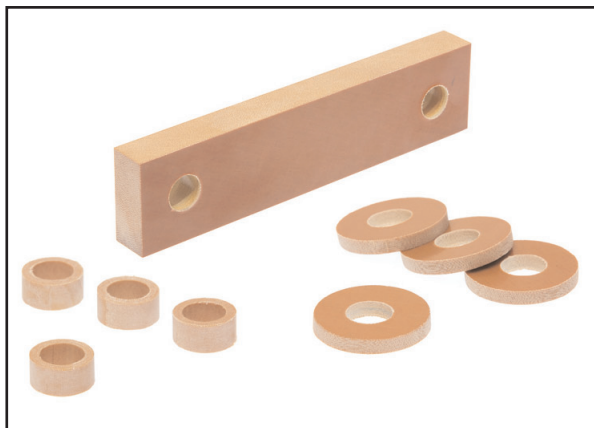
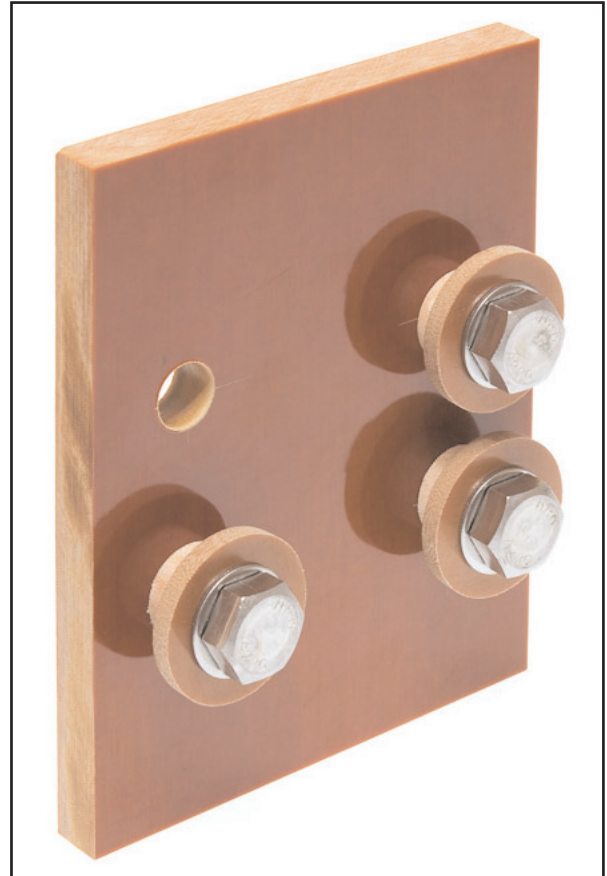
INTRODUCTION

Armatherm™ Fabric Reinforced Resin (FRR) Thermal Break Pads deliver high performance thermal insulation between interior and exterior steelwork and / or concrete to prevent thermal bridging. Cutting out thermal bridging stops conduction heat loss and prevents surface condensation from forming inside the building that can be due to cold transfer meeting warm air.

Specifications of Armatherm™ FRR

Maximum Loading Pressure N/mm	290
Strain at Maximum Pressure	5%
Compressive Modulus N/mm ²	4640
Shear Strength N/mm ²	110
Standard Thickness	13mm, 19mm, 25mm, & 50mm
Density Kg/M ³	1350
Thermal Conductivity W/m ² K	0.30
Minimum Operating Temp °C	-51
Maximum Operating Temp °C	150

For comparison, the thermal conductivity of Mild Steel is 56 W/m²K



■ See Frequently Asked Questions (FAQ) for more information on this product and Thermal Bridging.

Optional Extra



Bolt, Bush and Washer Kits.
See Details Over Leaf.



Washer and Bushing

With a bolt through insulation pad there is the possibility of a slight thermal transfer along the connecting bolt.

For the majority of installations this can be ignored, however this effect can be reduced with the addition of Insulation washers and bushing.

In extreme applications (e.g. Swimming Pools), to prevent condensation on the bolt head, a polyurethane nut cap can be supplied to effectively screen this cold surface from the internal environment.

BUSHING DETAIL

Bolt Size	Hole In Pad	Bushing ID	Bushing OD	Hole in Structure	Bushing Length (Standard)
M12	14	14	20	20	10
1/2"	0.55"	0.55"	0.78"	0.78"	0.375"
M16	18	18	24	24	13
5/8"	0.70"	0.70"	1.0"	1.0"	0.50"
M20	22	22	28	28	13
3/4"	0.86"	0.86"	1.10"	1.10"	0.50"
M24	26	26	32	32	17
1"	1.05"	1.05"	1.25"	1.25"	0.625"

WASHER DETAIL

Bolt Size	Washer ID	Washer OD	Thickness
M12	14	30	6
1/2"	0.55"	1.18"	0.25"
M16	18	40	6
5/8"	0.7"	1.57"	0.25"
M20	22	47	6
3/4"	0.86"	1.85"	0.25"
M24	26	50	6
1"	1"	2.00"	0.25"

