

# **Impact & Wear Resistant Ceramics**



## Impactalum is an advanced impact resistant ceramic and elastomer composite wear plate.

Impactalum panels have the alumina exposed to the material flow whilst being fully embedded within a specially designed elastomer.

Impactalum is excellent for applications of high impact and extreme wear. The alumina provides a very smooth surface for material flow and actually reduces its resistance to friction with service life. The elastomer backing also helps to reduce vibration and noise levels within the plant and is engineered to resist the size and type of impact experienced for each individual project.

The Impactalum wear plates use rubber as the bonding agent. The rubber is pressed around and between the alumina tiles and steel backing plate. The process of high pressure, heat and a superior bonding agent. This ensures removal of the alumina from the plate is virtually impossible.

Although standard panels are available, individual projects can be engineered by HMA Wear Solutions' fully trained and experienced field engineers.

The alumina can be laid out with staggered or aligned joints. Both tiles and cylinders can be used of different sizes and shapes.



#### **APPLICATIONS & HARDWARE**

#### **Application**

Raw Material Feed Head Chute Liners Impact Curtains Chute Liners Rock Boxes Skirt Boards Bucket Liners

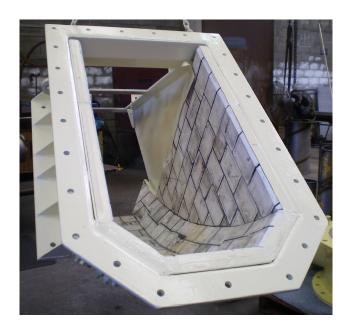
#### **Fastening Methods**

Rubber Bond Studs Captive Socket Plug Weld

#### **Backing Plates**

Plain Rubber with Captive Studs Mild Steel 3 Cr12 Stainless Steel





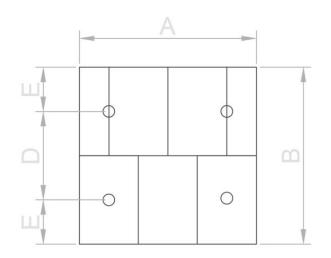


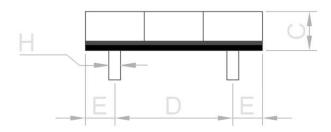




#### **STANDARD SIZING**

Size	A	В	C	D	E	H
303 X 303	303	303	63	153	75	M16 X 50
303 X 303	303	303	37	153	75	M16 X 50





#### **PRODUCT OPTIONS**



Panel with Cylinders



Panel with Hex



Panel with Tiles



Panel with Dimple Tiles



Panel with Backing Plate



SiSiC bonded with Rubber



#### **SPECIFICATIONS**

Mate	rial Properties	Units	Value
	Tensile Strength	MPa	16
Rubber	Break Extension	%	450-500
	Shore Hardness	-	60 <u>+</u> 5
	Break Permanent Deformation	%	30
	Main Composition		Natural Rubber + SBR
Peel Strength between rubber and ceramic / rubber and steel		MPa	6
Bonding Strength between rubber and ceramic		MPa	4

Panel Size	<b>303x303</b> , 200x200, 250x250, 400x400, 500x500, 600x600		
Ceramic Size	Ceramic tiles are available from 10 x 10 mm to 100 x 150 mm; thickness of ceramic tile can be from 1.5 mm to 50 mm.		
Backing Plate	Alloy steel plate with thickness ranging from 3 mm to 10 mm (Optional)		
Rubber Thickness	Depends upon the impact stress expected.		
Remarks	Metal+Rubber+Ceramic / Rubber+Ceramic Plain surface or Spherical surface. Studs also available upon request. Custom shapes can be made.		

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Email: wear@hmagrp.com