Data sheet

Insulating Roof Blocks BV range

ENGLISH

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Description

Insulating Roof Blocks BV are a range of insulating refractory blocks designed for use in suspended flat roofs. Each block comprises two sections of JM IFB, securely bonded with mortar and with an included stainless steel support plate.

Each block is machined to precise tolerance on all faces.

Type

Insulating roof blocks.

Classification temperature

JM 26	1430°C (2606°F)
JM 28	1540°C (2804°F)
JM 30	1650°C (3002°F)

Maximum continuous use temperature

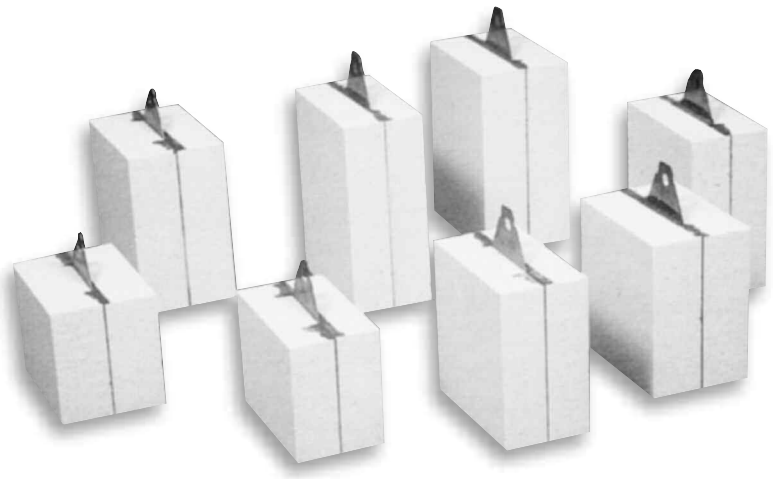
The maximum continuous use temperature depends on the application. In case of doubt, refer to your local Morgan Advanced Materials Thermal Ceramics business distributor for advice.

Features:

- **Good thermal insulation**
  The light weight and low thermal conductivity of the HM IFB precursors allow for the construction of thinner roof insulation with reduced heat losses and hence lower operating costs.
- **Low thermal mass**
  The light weight of the blocks means the heat absorbed by the furnace structure is greatly reduced, leading to lower fuel consumption, especially in intermittent and batch firing kilns.
- **Simplified engineering**
  Flat roofs eliminate lateral stresses and allow for simpler and lighter supporting brick and steelwork. They also eliminate the need to special brick shapes, such as arches and wedges.
- **Easy installation**
  Flat roofs are much simpler and quicker to install than are traditional arches and do not needs specialized bricklaying skills. They also lend themselves to modular prefabrication, further reducing onsite installation time and labour costs.
- **Low maintenance costs**
  Roof repairs and block replacement can be carried out without necessarily shuttling down the furnace, so reducing maintenance time and costs.
- **Accurate dimensions**
  Morgan Advanced Material's Thermal Ceramics business's insulating roof blocks are manufactured to close dimensional tolerances, giving uniform construction with tight mortar free joints.

Typical Applications

Insulating rood blocks are intended mainly for use as the hot-face layer in the roofs of furnaces, replacing classic arch roofs in tunnel and other kilns.



Data sheet

Insulating Roof Blocks BV range

Metric information

	BV 26	BV 28	BV 30
IFB precursor	JM 26	JM 28	JM 30
IFB classification temperature °C	1430	1540	1650
Support plate steel	AISI 321	AISI 321	**
Plate thickness mm	1.2	1.2	1.2
Properties Measured at Ambient Conditions (23°C/50% RH)			
IFB density (ASTM C-134) kg/m³	800	890	1020
IFB modulus of rupture (ASTM C-93) MPa	1.5	1.8	2.1
IFB cold crushing strength (ASTM C-93) Mpa	1.6	2.1	2.2
High Temperature Performance			
Ferric oxide, Fe_2O_3	0.7	0.8	0.9

** depends on the application

Quantity of block pieces per pallet and weight in kg per block							
a x b mm	**BV 26**		**BV 28**		**BV 30**		**c**
	pcs/pallet	**kg/pce**	**pcs/pallet**	**kg/pce**	**pcs/pallet**	**kg/pce**	
230 x 230	160	5.5	160	6.4	160	7.4	130
230 x 230	120	6.7	120	7.5	120	8.5	154
250 x 250	128	6.7	128	7.5	128	8.5	130
305 x 230	120	7.5	120	8.5	120	9.5	130
305 x 230	90	8.9	90	10	90	11.4	154

In addition to the standard range, blocks of special dimensions can be supplied to a drawing, together with non-standard plate shapes and steel grade (Inconel, Din 4841, AISI 310).

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