KalsiPartition

Technical Data Sheet

Date: 10 Dec 2020



1. Product Description

KalsiPartition is a non combustible fiber cement panel, manufactured on Hatschek machine from a precise combination of cement, silica and natural organic reinforcing fibers. During the production, the boards are cured and stabilized in an autoclave process involving high temperature and pressure control, ensuring a final product with optimum dimensional stability and exceptional mechanical properties.

2. Applications

KalsiPartition is suitable for most demanding internal drywall partition and wet area applications,

- a. wall systems developed using KalsiPartition allows for design flexibility in terms of number layer, thickness of wall, inclusion of insulation material such as mineral wool in its cavity
- b. to be designed to suit various demand of thermal, fire and acoustic performance
- c. all kinds of conduit, wiring, pipe and other services are systematically installed in the cavity of developed system

It is a superb alternative to plasterboard system and conventional brickwall by offering an incredibly lightweight solution with simple, fast and clean installation.

3. Benefits

KalsiPartition is an advanced building material, serving as the best alternative to conventional brick wall or plasterboard or other wood/ cement based products;

- a. Wide variety of thicknesses and applications
- b. Dimensionally stable
- c. Impact resistant
- d. Moist, mould and water resistant
- e. Resistant to attack of termites, insects and other vermin
- f. Easy to install and work with
- g. Environmental-friendly, no harmful gas emission
- h. Non combustible

4. Dimensions and tolerances:

Available Dimensions

Product	Thickness (mm)	Width x Length (mm)
KalsiPartition	8.0	1200 x 2400, 1220 x 2440
	9.0	1200 x 2400, 1220 x 2440

Dimensional Tolerance

Thickness	± 10 %
Width	± 6 mm
Length	± 8 mm
Squareness of Edges	≤ 0.4 %
Straightness of Edges	≤ 0.3 %

Weight (ex-works) based on nominal density plus variation

Thickness (mm)	Weight (kg/m²)	Weight (kg/sheet)
8.0	+/- 11.36	+/- 33.9
9.0	+/- 12.78	+/- 38.1

Thicknesses, sizes, and types of the sheets which differ from those available as standard, are available subject to minimum order quantities. Please contact Etex Building Performance Indonesia for more information.



KalsiPartitionTechnical Data Sheet



Date: 10 Dec 2020

5. Technical Properties

The product has been tested based on internationally recognized standards and test methods for the fiber cement flat sheet and building material requirements such as ISO 8336, EN 12467, ASTM C1185, BS 476 relevant parts on material reaction to fire and EN13501 fire classification standards.

Physical and Mechanical Properties	Value	Standard
Dimensional Conformity	Level II	ISO 8336
- Thickness	(Pass)	
- Length		
- Width		
- Straightness of edges		
- Squareness of edges		
Density (average)	> 1250 kg/m ³	ISO 8336
Bending strength (Category C - Class 3 average)	> 10.0 MPa	ISO 8336
Bending Elastic Modulus (ambient)	> 8500 MPa	ISO 8336
Water absorption	33 ± 2 %	ASTM C1185
Moisture content	10 - 15 %	ASTM C1185
Moisture movement (Hygric) –	≤ 0.04 %	ISO 8336
Relative Humidity from 30% to 90%		
Thermal conductivity	0.25 W/mK	ASTM C518:2010
Durability	Value	Standard
-		
Heat-rain performance – Category C	Not Required	ISO 8336
Heat-rain performance – Category C Warm water performance	Not Required Passed	ISO 8336
	· ·	
Warm water performance	Passed	ISO 8336
Warm water performance Soak-dry performance – Category C : 25 Cycles	Passed 50 Cycles	ISO 8336 ISO 8336
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C	Passed Passed 50 Cycles Not Required	ISO 8336 ISO 8336 EN 12467:2016
Warm water performance Soak-dry performance — Category C : 25 Cycles Freeze-thaw performance — Category C Reaction to Fire	Passed Passed 50 Cycles Not Required Value	ISO 8336 ISO 8336 EN 12467:2016 Standard
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C Reaction to Fire Non Combustibility	Passed Passed 50 Cycles Not Required Value Non Combustible	ISO 8336 ISO 8336 EN 12467:2016 Standard BS 476 Part 4:1970
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C Reaction to Fire Non Combustibility Surface spread of flame	Passed Passed 50 Cycles Not Required Value Non Combustible Class 1	ISO 8336 ISO 8336 EN 12467:2016 Standard BS 476 Part 4:1970 BS 476 Part 7:1997
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C Reaction to Fire Non Combustibility Surface spread of flame	Passed Passed 50 Cycles Not Required Value Non Combustible Class 1 I = 2.3	ISO 8336 ISO 8336 EN 12467:2016 Standard BS 476 Part 4:1970 BS 476 Part 7:1997
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C Reaction to Fire Non Combustibility Surface spread of flame	Passed Passed 50 Cycles Not Required Value Non Combustible Class 1 I = 2.3 i1 = 2.1	ISO 8336 ISO 8336 EN 12467:2016 Standard BS 476 Part 4:1970 BS 476 Part 7:1997
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C Reaction to Fire Non Combustibility Surface spread of flame	Passed Passed 50 Cycles Not Required Value Non Combustible Class 1 I = 2.3 i1 = 2.1 i2 = 0.1	ISO 8336 ISO 8336 EN 12467:2016 Standard BS 476 Part 4:1970 BS 476 Part 7:1997
Warm water performance Soak-dry performance – Category C : 25 Cycles Freeze-thaw performance – Category C Reaction to Fire Non Combustibility Surface spread of flame Fire propagation index	Passed Passed 50 Cycles Not Required Value Non Combustible Class 1 I = 2.3 i1 = 2.1 i2 = 0.1 i3 = 0.1	ISO 8336 ISO 8336 EN 12467:2016 Standard BS 476 Part 4:1970 BS 476 Part 7:1997 BS 476 Part 6:1989

All material properties and physical performance are mean values given for information and guidance only. If certain properties are critical for particular application, it is advisable to consult Etex Building Performance Indonesia. Etex Building Performance Indonesia reserves the right to amend this information sheet without prior notice.



KalsiPartition Technical Data Sheet



Date: 10 Dec 2020

6. Health and safety aspects

During the mechanical machining of panels, airborne dust which may be hazardous to health, may be released. Avoid direct contact of dust with skin and eyes as they may cause irritation.

The use of dust extraction equipment is advised. Respect regulatory occupational exposure limits for total inhalable and respirable dust.

For more information, please check the Material Safety Data Sheet before working with the product.

7. Certification

All Etex Building Performance Indonesia products are manufactured in line with the ISO standards. Etex Building Performance Indonesia manufacturing facility achieved the certificates of ISO 9001:2008, ISO 14001:2015 and OHSAS 18001:2007. These certificates can also be downloaded from www.kalsi.co.id.

---- End of Session ----

For technical assistance please contact:

Unit 19-02-01 Wisma Tune, 19 Lorong Dungun, Damansara Heights, 50490 Kuala Lumpur, Malaysia **T** +60 (3) 2095 5111 **F** +60 (3) 2095 6111 **E** info@kalsi-building-solutions.com **www.kalsi-building-solutions.com**

