

## SINIAT STANDARD PLASTERBOARDS

### Compliance to Standards

Siniat Standard Plasterboards carry an SABS Mark of Approval under specification SANS 266: "South African National Standard: Plasterboards"

### Sizes Available

Thickness Available (mm)	Board Widths available (mm)	Lengths Available (mm)
6.4	900	2400, 2700, 3000, 3300, 3600, 4200
	1200	2400, 2700, 3000, 3300, 3600, 4200
9	1200	2400, 2700, 3000, 3300, 3600
12	1200	2400, 2700, 3000, 3300, 3600

### Tolerances

Dimension	Unit	Target	Tolerance
Width	mm	900	+0 -5
	mm	1200	+0 -5
Length	mm	2400	+0 -5
	mm	2700	+0 -5
	mm	3000	+0 -5
	mm	3300	+0 -5
	mm	3600	+0 -5
	mm	4200*	+0 -5
Thickness	mm	6,4	+0.5 -0.5
	mm	9,0	
	mm	12,0	
Rectangularity: 900mm width 1200mm width	mm		3mm
	mm		4mm
Edge angles	degrees	90	+3 -6
Taper width	mm	60	+10 -10
Taper depth	mm	1,2	+0.5 -0.2

\* Only available in 6.4mm thickness

# Technical Data Sheet



## Physical Properties:

Property	Method	Unit	Minimum Requirement
<b>Paper to Core Bond</b> All thicknesses	SANS 266	%	67
<b>Maximum Breaking Load:</b> 6.4mm			
• Transverse	SANS 266	N	120
• Longitudinal	SANS 266	N	305
9.0mm			
• Transverse	SANS 266	N	140
• Longitudinal	SANS 266	N	360
12.0mm			
• Transverse	SANS 266	N	180
• Longitudinal	SANS 266	N	500
<b>Physical Properties Other</b>		<b>Unit</b>	<b>Range</b>
<b>Nail Pull Out Strength</b>			
• 6.4mm	-	daN	20-40
• 9.0mm	-	daN	20-40
• 12.0mm	-	daN	20-40
<b>Thermal Properties</b>		<b>Unit</b>	<b>Typical Values</b>
Thermal Conductivity – K-value	ASTM C518 TO178-W1-015	W/m.K	0.104
Thermal Resistance			
• 6.4mm	ASTM C518	m <sup>2</sup> .K/W	0.062
• 9.0mm	ASTM C518	m <sup>2</sup> .K/W	0.087
• 12.0mm	ASTM C518	m <sup>2</sup> .K/W	0.116
<b>Fire Properties</b>		<b>Unit</b>	<b>Typical Values</b>
Surface Fire Index	SANS 10177: 3	Class	1
<b>Safety and Health</b>			
VOC	ASTM D5116	g/litre	<0.01
Formaldehyde	ASTM D5116	g/litre	<0.5

Acoustical Resistance	Method	Unit	Minimum Requirement
Acoustical Resistance – $R_w$ Value			
<ul style="list-style-type: none"> <li>9mm board only</li> </ul>	Marshall Day	dB	26
<ul style="list-style-type: none"> <li>12mm board only</li> </ul>	Marshall Day	dB	27
Acoustical Resistance – $R_w$ Value – Theoretical Predictions by professional acoustical engineer			
<ul style="list-style-type: none"> <li>Suspended Ceilings using 9mm Siniat Ceiling Tiles in Siniat Master Grid                             <ul style="list-style-type: none"> <li>Without insulation</li> <li>With 50mm 14 density Glass Wool</li> <li>With 50mm 47 density Glass Wool</li> <li>With 100mm 47 density Glass Wool</li> <li>With 50mm 80 density Mineral Wool</li> </ul> </li> </ul>	ISO 140/IV	dB	25
	ISO 140/IV	dB	30
	ISO 140/IV	dB	31
	ISO 140/IV	dB	33
	ISO 140/IV	dB	33
<ul style="list-style-type: none"> <li>Suspended Ceilings using 12mm Siniat Ceiling Tiles in Siniat Master Grid                             <ul style="list-style-type: none"> <li>Without insulation</li> <li>With 50mm 14 density Glass Wool</li> <li>With 50mm 47 density Glass Wool</li> <li>With 100mm 47 density Glass Wool</li> <li>With 50mm 80 density Mineral Wool</li> </ul> </li> </ul>	ISO 140/IV	dB	26
	ISO 140/IV	dB	32
	ISO 140/IV	dB	33
	ISO 140/IV	dB	35
	ISO 140/IV	dB	34
<ul style="list-style-type: none"> <li>Partition Systems                             <ul style="list-style-type: none"> <li>12mm single skin partition system on 102mm studs with 50mm 14 density Polyester Wool</li> <li>9mm single skin partition system On 64mm studs with 50mm 14 density Glass wool</li> </ul> </li> </ul>	ISO 140/IV	dB	50
	Marshall Day	dB	41

Contact Marley Building Systems for installation details and for more acoustic solutions.

## Performance Tests

### Fire Rated Systems:

Siniat 12mm Plasterboard used on 64mm drywall studs at 600mm spacing has a 30 minute fire resistance rating in accordance with SANS 10177:2.

### **SINIAT DRYWALL LPF 64 – 30/1 30 MIN FIRE RATING INTERNAL PARTITION SYSTEM**

Non-load-bearing drywall system  
12mm Standard Plasterboard - one layer each side

**APPLICATION:** Commercial and Residential

### **WALL PROPERTIES**

64mm stud  
30 min fire rating  
Sound insulation reduction index - 38dB  
Thickness - 89mm  
Approximate weight - 21kg/m<sup>2</sup>

### **MATERIAL USED**

- A - 64mm Siniat Drywall steel stud
- B - 65mm Siniat Drywall steel track
- C - 12mm Standard Tapered Edge Plasterboard
  - 25mm Drywall Screws
  - Siniat Premium Jointing Plaster
  - Floor and ceiling finishes as per specification

### **APPLICATION DETAIL**

Set Siniat Steel Studs spaced at 600mm c/c into steel track at floor and ceiling.  
Apply a single layer of 12mm Siniat Tapered Edge Plasterboard to each side using 25mm drywall screws spaced at 220mm c/c.  
Tape and joint according to specification.  
Refer to standard specification.  
Acoustic performance requires sealing between track, floor, ceiling and any other abutment joints.  
Stagger the plasterboard joints in the system.

### Installation Details:

Please refer to the Siniat Technical Manual for detailed installation instructions.

