

**PLEASE NOTE:**

**SANS 428 CLASSIFICATION & USAGE**

1. The fire classification shall apply to material thicknesses equal or less than the thickness as indicated in the test report.
2. There are no limitations on the usage of non-combustible materials A/A1/1.
3. All other materials classified as “B” to be used as per occupancy classification on page 4.

**BULK INSULATION (Flexible or Loose fill) Database**

[Generally installed on top of ceiling in buildings]

Note: Bulk ceiling insulation is generally un-faced UNLESS SPECIFIED which then changes the product classification

Product/Brand Name	Thick (mm)	Type	Insulation manufacturer / Sole distributor	Fire report number	Report date	Fire Classification
*Aerolite (Think Pink)	135	Glass wool	Isover Saint Gobain	FTC13-088	2013/08/20	A/A1/1
*Eco Insulation	100	Cellulose fibre	Eco Insulation	FTC19-031	2019/05/28	B/B1/2 H only
*Fabufill	50	Polyester fibre	Platinum Fibre	BCT-180627-00051	2018/06/28	B/B1/2 H only
*Isotherm	145	Polyester fibre	Brits Non-woven	FTC17-082	2017/05/12	B/B1/2 H only
*Knauf Ceiling Roll	50	Mineral Wool	Knauf Insulation	FTC18-005 (2)	2018/04/19	A/A1/1
*Knauf Ceiling Roll	135	Mineral Wool	Knauf Insulation	FTC17-006	2017/10/18	A/A1/1
*Romatherm/EMSulation	135	Polyester fibre	Datlink Insulation	FTC15-148	2016/01/05	B/B2/2 H only
*Starfibre	135	Polyester fibre	D&D Roof Insulations	FTC 15-142	2016/01/05	B/B2/2 H only
*Starlite (Acrylic)	135	Acrylic fibre	D&D Roof Insulations	FTC14-007	2014/05/16	A/A1/1
*Thermguard	100	Cellulose Fibre	Thermguard CC	BCT-200326-00063	2020/03/26	B/B1/2 H only

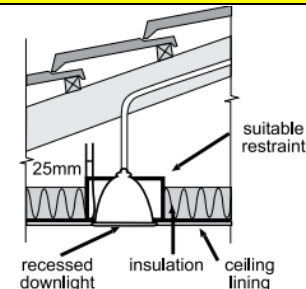
**SAFETY ALERT – CEILING INSULATION**

**Heat-producing fixtures should be isolated from the thermal insulation to prevent fire hazards.**

These include recessed lighting fixtures, i.e. down lighters.  
Install non-combustible down lighter protection covers, to protect the insulation.  
Down lighters should **NEVER** be covered with insulation.

Unless otherwise specified by the manufacturers installation specifications;

- Do not install insulation within 90mm of hot flues or exhaust fans, or within 25mm of recessed light fittings.
- Use accredited insulation installers only.



Example:



Photograph courtesy of Eco Insulation

**BULK INSULATION - Rigid un-faced Database**

[Generally installed in cavity walls]

Product/Brand Name	Thick (mm)	Type	Insulation manufacturer / Sole distributor	Fire report number	Report date	Fire Classification
*Cavitylite/Cavitybatt	102	Glass Wool	Saint-Gobain Isover	FTC17-196 R1	2017/10/12	A/A1/1

**BULK INSULATION (Rigid faced & un-faced) Database**

[Generally installed as suspended ceiling]

*Isolam Ceiling Boards	40	PVC Foil/EPS	Isowall Southern Africa	FTC18-159(2)	2018/10/10	B/B1/2/H only (USP)
*LiteSpan Ceiling Panel	50 -100	FRCel 15DV EPS	Technopol	FTC18-284(2)	2019/02/05	B/B1/2/H only (USP)
*LiteSpan Ceiling Panel	50 -120	FRCel 12DV EPS	Technopol	FTC19-117	2019/08/08	B/B1/2/H only (SP & USP)
*Polycool	70	Faced/EPS	Technopol	FTC17-104	2017/07/24	B/B1/2/H only (USP)
*ThermocousTex Plain Board	35	Polyester/Kenaf	Datlink Insulation	FTC15-004(a)	2015/07/07	B/B1/2 H only (USP)

**BULK INSULATION (Rigid un-faced) Database**

[Generally installed under roof & over purlins and/or side cladding in buildings]

*FRCel 18DV	120	EPS	Technopol	FTC19-194	2019/10/21	B/B1/2/H (SP & USP)
*Isoboard	80	XPS	Isofoam SA (Pty) Ltd	FTC15-029	2015/08/24	B/B1/2/H&V (SP & USP)
*Summit XPS	80	XPS	Swartland Insulation	FTC19-117	2020/10/13	B/B1/2/H&V (SP & USP)

All information, recommendation or advice contained in this publication is given in good faith to the best of TIPSASA's knowledge and based on current standards and regulations in effect. TIPSASA cannot be held responsible for any loss incurred through incorrect or faulty use of its Publications. No responsibility will be accepted by TIPSASA for any errors and/or omissions, which may have inadvertently occurred. © For more information please phone (012) 663 5200 / 663 1480 / 0861 000 334 or Mobile: 082 305 8559 Website: www.tipsasa.co.za

**PLEASE NOTE:**

**SANS 428 CLASSIFICATION & USAGE**

1. The fire classification shall apply to material thicknesses equal or less than the thickness as indicated in the test report.
2. There are no limitations on the usage of non-combustible materials A/A1/1.
3. All other materials classified as “B” to be used as per occupancy classification on page 4.

<b>COMPOSITE BULK INSULATION – Flexible (Faced) Database</b> [Generally installed under roof & over purlins and/or side cladding in buildings]						
Product/Brand Name	Thick (mm)	Type	Insulation manufacturer / Sole distributor	Fire report number	Report date	Fire Classification
*Acoustisorb Black Liner	50	Polyester	Brits Nonwoven	FTC19-074	2019/06/14	B/B1/2/H&V (SP & USP)
*Alucool	135	FKP/Fiberglass	Africa Thermal Insulation	FTC19-019	2019/04/15	A/A1/1
*Factorylite WMF	135	WMF/Fiberglass	Saint-Gobain Isover	BTC19-00052A	2019/02/27	A/A1/1
*Factorylite Foil Faced	135	FF/Fiberglass	Saint-Gobain Isover	BTC19-00052B	2019/02/27	A/A1/1
*Ductwrap	50	Foil/Glass Wool	Saint-Gobain Isover	FTC18-149	2018/08/27	A/A1/1
*Isover Sonic Liner	50	Faced GlassWool	Saint-Gobain Isover	FTC18-144	2018/07/30	A/A1/1
*MBIF Foil Faced	135	Foil/Fiberglass	Brits Non-woven/Granric	FTC18-222	2018/09/28	A/A1/1
*MBIW White Faced	135	White/Fiberglass	Brits Non-woven/Granric	FTC18-223	2018/09/28	A/A1/1
*MBI White WMF Coated	75	Coated/Fiberglass	Brits Non-woven/Granric	FTC15-053 R1	2015/08/04	A/A1/1
*Starlite AC (Acrylic) Foil Faced	50	Foil/Fiberglass	D & D Roof Insulations	FTC09-046 a	2012/12/11	A/A1/1
*Starlite (Glass Fibre) White Faced	135	Foil/Fiberglass	D & D Roof Insulations	FTC19-041	2019/05/27	A/A1/1
*Starlite (Glass Fibre) Foil Faced	100	Foil/Fiberglass	D & D Roof Insulations	FTC10-133 a	2012/12/11	A/A1/1
*Starlite PH (Phenolic) White Faced	100	Foil/Fiberglass	D & D Roof Insulations	FTC12-057a	2012/08/29	A /A1/1
*Starlite PH (Phenolic) Foil Faced	50	Foil/Fiberglass	D & D Roof Insulations	FTC12-057b	2012/08/29	A /A1/1
*Starlite Foil (AFT Faced)	100	Foil/Fiberglass	D & D Roof Insulations	FTC12-130	2012/12/03	A /A1/1
*ThermocousTex Foil Faced	50	Foil/Polyester	Datlink Insulation	FTC15-004(b)	2015/07/08	B/B1/2/H (USP)
<b>COMPOSITE BULK INSULATION – Rigid (Faced) Database</b> [Generally installed under roof & over purlins and/or side cladding in buildings]						
Product/Brand Name	Thick (mm)	Type	Insulation manufacturer / Sole distributor	Fire report number	Report date	Fire Classification
*Acoustisorb Black / White / Grey	50	Polyester	Brits Nonwoven	FTC19-074	2019/06/14	B/B1/2/H&V (SP & USP)
*Factoryboard WMF	50	WMF/Fiberglass	Saint-Gobain Isover	FTC10-169	2011/03/02	B/B1/2/H&V (SP & USP)
*Factoryboard Foil Faced	50	Foil/Fiberglass	Saint-Gobain Isover	FTC10-132	2010/12/01	B/B1/2/H&V (SP & USP)
*Lambdaboard	40	WF/PIR	Rigifoam	FTC09-140	2009/11/20	B/B1/2/H&V (SP & USP)
*Lambdaboard	100	WM/MN/PIR	Rigifoam	FTC14-120	2014/10/29	B/B1/2/H (USP)
*Supacool White Faced	50	Faced/EPS	Technopol	FTC16-208(R1)	2016/11/16	B/B1/2/H only (USP)
<b>ALTERNATIVE COMPOSITE INSULATION SYSTEMS (ACIS) – NON STANDARD PRODUCTS</b>						
<b>WARNING - NON STANDARD PRODUCTS - WARNING</b>						
<p><b>DO NOT</b> use two combustible insulation products in conjunction with one another to form an Alternative Composite Insulation System (ACIS), for example; a combustible rigid board with a combustible flexible fibre blanket, to comply with the required thermal resistance in SANS 10400-XA <i>Energy usage in buildings</i>, <u>unless</u> it has a valid fire test report to verify that it was tested together and can be used as such. Only use composites products with a valid fire test report, i.e. tested together as a unit, not individually tested. See below.</p>						
Product/Brand Name	Insulation manufacturer / Sole distributor		Fire report number	Report date	Fire Classification	
*35mm Lambdaboard with 100mm Starlite Bulk	D & D Roof Insulations		FTC14/123	2014/12/03	B/B1/2/H only (USP)	
*50mm Isoboard with 135mm Knauf Bulk Insulation	Isofoam SA (Pty) Ltd		FTC 18/256	2018/11/28	B/B1/2/H only (USP)	
<p>*All information, recommendation or advice contained in this publication is given in good faith to the best of TIPSASA's knowledge and based on current standards and regulations in effect. TIPSASA cannot be held responsible for any loss incurred through incorrect or faulty use of its Publications. No responsibility will be accepted by TIPSASA for any errors and/or omissions, which may have inadvertently occurred. © For more information please phone (012) 663 5200 / 663 1480 / 0861 000 334 or Mobile: 082 305 8559 Website: www.tipsasa.co.za</p>						

**PLEASE NOTE:**

**SANS 428 CLASSIFICATION & USAGE**

1. The fire classification shall apply to material thicknesses equal or less than the thickness as indicated in the test report.
2. There are no limitations on the usage of non-combustible materials A/A1/1.
3. All other materials classified as “B” to be used as per occupancy classification on page 4.

REFLECTIVE FOIL LAMINATES used as RADIANT BARRIER/UNDERTILE MEMBRANE Database [Generally installed under roof & over rafters in residential applications]					
Product/Brand Name	Type	Insulation manufacturer / Sole distributor	Fire report number	Report date	Fire Classification
*Absto DFR 251Foil Scrim Facing	Foil	Absto Industrial Supplies	FTC 19-122	2019/08/08	A/A1/1
*Absto DFR 251 White Scrim Facing	Foil	Absto Industrial Supplies	FTC 20-219	2021 01 19	A/A1/1
*Absto DFR201B Foil Scrim Facing	Foil	Absto Industrial Supplies	FTC 19-208	2019/10/21	A/A3/3 H only
*Alulite	LDPE	Africa Thermal Insulation	FTC 16-083	2016/07/20	B/B1/2 H only
*Envirotoff 201FR	Foil	Rhino Plastics (Pty) Ltd	FTC 18-100	2018/07/20	B/B3/3 H only
*Envirotoff 202ECO	Foil	Rhino Plastics (Pty) Ltd	FTC 16-008 R1	2016/04/08	B/B1/2 H only
*Envirotoff 202FR	Foil	Rhino Plastics (Pty) Ltd	FTC 18-329 (2)	2019/03/18	A/A1/1
*Marley Supreme Single Sided	Foil	Rhino Plastics (Pty) Ltd	FTC 18-100	2018/07/20	B/B3/3 H only
*Marley Supreme Double Sided	Foil	Rhino Plastics (Pty) Ltd	FTC 16-008 R1	2016/04/08	B/B1/2 H only
*Marley Superior Double Sided	Foil	Rhino Plastics (Pty) Ltd	FTC 18-329 (2)	2019/03/18	A/A1/1
*Saftherm 201FR	Foil	Rhino Plastics (Pty) Ltd	FTC 18-100	2018/07/20	B/B3/3 H only
*Saftherm 202ECO	Foil	Rhino Plastics (Pty) Ltd	FTC 16-008 R1	2016/04/08	B/B1/2 H only
*Saftherm 202FR	Foil	Rhino Plastics (Pty) Ltd	FTC 18-329 (2)	2019/03/18	A/A1/1
*Sisalation 405	Foil	Afripack Coatings	BCT17071900029R2	2017/10/01	B/B1/2 H only
REFLECTIVE FOIL LAMINATES Database [Generally installed over purlins and/or side cladding in Industrial Buildings]					
Product/Brand Name	Type	Insulation manufacturer / Sole distributor	Fire report number	Report date	Fire Classification
*Alububble D10 Code 2906 Single	MPET	Africa Thermal Insulation	FTC18-101	2018/07/05	B/B1/2/H only (SP & USP)
*Alububble D10 Code 1983 Double	LDPE	Africa Thermal Insulation	FTC16-066	2016/07/20	B/B1/2H only (SP & USP)
*Alububble D10 Code 1983 Double	LDPE	Africa Thermal Insulation	FTC17-250	2018/02/05	B/B1/2V (USP)
*Alucushion D10 Code 2906 FR	LDPE	Alucushion (Pty) Ltd	FTC19-040 (a)	2019/05/17	B/B1/2/H only (SP & USP)
*Envirotoff 202FR	Foil	Rhino Plastics (Pty) Ltd	FTC18-329 (2)	2019/03/18	A/A1/1
*Envirotoff 203ECO	Foil	Rhino Plastics (Pty) Ltd	FTC16-046	2016/06/21	B/B1/2/H (SP) only
*Marley Superior Double Sided	Foil	Rhino Plastics (Pty) Ltd	FTC18-329 (2)	2019/03/18	A/A1/1
*Marley Industrial Double Sided	Foil	Rhino Plastics (Pty) Ltd	FTC16-046	2016/06/21	B/B1/2/H (SP) only
*Saftherm 202FR	Foil	Rhino Plastics (Pty) Ltd	FTC18-329 (2)	2019/03/18	A/A1/1
*Saftherm 203ECO	Foil	Rhino Plastics (Pty) Ltd	FTC16-046	2016/06/21	B/B1/2/H (SP) only
*Sisalation Fireshield NC 501 S/S	Foil	Afripack Coatings	FTC17-283 R1	2018/03/29	A/A1/1/H&V (SP & USP)
*Sisalation Fireshield NC 502 D/S	Foil	Afripack Coatings	FTC17-284	2018/03/29	A/A1/1/H&V (SP & USP)
*Sisalation FR 405	Foil	Afripack Coatings	FTC15-095 (R1)	2015/08/31	B/B1/2/H only (SP & USP)
*Sisalation FR 430	Foil	Afripack Coatings	FTC13-161	2014/03/31	B/B1/2/H only (SP & USP)
*All information, recommendation or advice contained in this publication is given in good faith to the best of TIPSASA's knowledge and based on current standards and regulations in effect. TIPSASA cannot be held responsible for any loss incurred through incorrect or faulty use of its Publications. No responsibility will be accepted by TIPSASA for any errors and/or omissions, which may have inadvertently occurred. © For more information please phone (012) 663 5200 / 663 1480 / 0861 000 334 or Mobile: 082 305 8559 Website: www.tipsasa.co.za					



**APPLICABLE TO THERMAL INSULATION MATERIALS**

**Fire performance classification of thermal insulated building envelope systems in accordance with SANS 428:2012**

In accordance with the application of the National Building Regulations SANS 10400 Part T *Fire Protection*, the fire performance classification of products is required in terms of section 4.5 subsection 4.5.3, section 4.12 subsection 4.12.1.5, and section 4.13 subsection 4.13.1; which states, quote "When any insulation, roof lining or waterproof membrane not used as a ceiling and used under a roof covering as part of a roof assembly, is tested in accordance with SANS 10177-5 and found to be combustible, such material shall be acceptable should it be classified, marked and installed in accordance with the requirements of SANS 428" unquote.

In accordance with SANS 428, the classified product shall bear the manufacturer's name; date manufactured, batch number, trade name and SANS 428 Classification. This classification shall be fixed permanently to the original product and container/packaging and include the end-use conditions of approval, i.e. Fire Performance Classification. The classification shall apply to material thicknesses equal or less than the thickness as indicated in the test report.

**Combustibility**

1. Classification Type Combustibility	Class	Description of materials behaviour and occupancies
	A	Non-combustible
	B	Combustible

**Surface Fire Properties**

2. Classification Type Surface Fire Properties	Class	Description of materials behaviour and occupancies
	A1 or B1	No flame spread
	A2 or B2	Low flame spread (no flaming droplets or burning brand)
	A3 or B3	Low flame spread (with flaming droplets or burning brand)
	A4 or B4	Average flame spread (no flaming droplets or burning brand)
	A5 or B5	Average flame spread (with flaming droplets or burning brand)
	A6 or B6	Rapid fire spread

**3. Use of products in accordance with Occupancy Classifications see Regulation A20**

The symbols below shall be used to indicate the designated use of materials in buildings.

Class of Occupancy	Type of Occupancy	Use	Class of Occupancy	Type of Occupancy	Use
A1	Entertainment & Public Assembly	1	E3	Other institutional (residential)	1
A2	Theatrical & indoor sport	2	E4	Health care	2
A3	Places of instruction	2	F1	Large shop	3
A4	Worship	2	F2	Small shop	3
A5	Outdoor sport	4	F3	Wholesalers' store	3
B1	High risk commercial	2	G1	Offices	3
B2	Moderate risk commercial	2	H1	Hotel	1
B3	Low risk commercial	3	H2	Dormitory	1
C1	Exhibition hall	2	H3	Domestic residence	3
C2	Museum	2	H4	Dwelling house	3
D1	High risk industrial	2	H5	Hospitality	3
D2	Moderate risk industrial	2	J1	High risk storage	2
D3	Low risk industrial	3	J2	Moderate risk storage	2
D4	Plant room	1	J3	Low risk storage	3
E1	Place of detention	1	J4	Parking garage	4
E2	Hospital	1			

Notes: 1) The number 1 under "use" indicates that **only non-combustible products** are to be used in that particular building occupancy classification.

2) The classification as listed above (numbers 2, 3 & 4) implies that products with equal or better classification are also suitable for usage. Classification listed is for both sprinklered and un-sprinklered buildings, with the proviso that the product has been successfully evaluated as suitable for use with sprinklers.

**4. Permissible Application**

**5. Tested with sprinklers (SP) or without sprinklers (USP)**

Horizontal (under-roof) only	H	Not protected by a sprinkler system.	USP
Vertical (side cladding) only	V	Protected by a sprinkler system.	SP
Horizontal and vertical application	H & V		

**Example of Fire Performance Classification**

1. Combustibility	2. Surface Fire Properties	3. Use per Occupancy	4. Application	5. Sprinkler (SP) or Un-sprinklered (USP)
A = Non-combustible	A1 = No flame spread	1 = No limitations	H & V = Horizontal & Vertical	
B = Combustible	B1 = No flame spread	2/3/4 = Use list for Building Occupancy Classes	H / V / or H & V = Horizontal & Vertical	Tested SP or USP State SP or USP