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Table 1: 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

SAFETY ALERT – CEILING INSULATION

Heat-producing fixtures should be isolated from the thermal insulation to prevent fire hazards. These include recessed lighting fixtures.

Install non-combustible downlight protection covers, to protect the insulation.

PRODUCT/ BRAND NAME	THICKNESS (mm)	TYPE	INSULATION MANUFACTURER / SOLE DISTRIBUTOR	REPORT NUMBER	REPORT DATE	SANS 428 CLASSIFICATION							SANS 53501-1 CLASSIFICATION 2024						
						CLASSIFICATION	SANS 10177-5	SANS 10177-10	SANS 10177-11	HORIZONTAL (H)	VERTICAL (V)	UNSPRINKLERED	SPRINKLERED	CLASSIFICATION	SANS 11820	SANS 1743	SANS 11925-2	SANS 53823	
*Aerolite (Think Pink)	135	Glass wool	Isover Saint-Gobain	FTC13-088	2013/08/20	A/A1/1	*	*							A1	*	*		
*Eco Insulation	100	Cellulose fibre	Eco Insulation	FTC19-031	2019/05/28	B/B1/2 H	*	*											
*Fabufill	50	Polyester fibre	Platinum Fibre	BCT-180627-00051	2018/06/28	B/B2/2 H	*	*											
*Isotherm	145	Polyester fibre	Brits Non-woven	FTC17-082	2017/05/12	B/B1/2 H	*	*											
*Knauf Ceiling Roll	50	Mineral Wool	Knauf Insulation	FTC18-005 (2)	2018/04/19	A/A1/1	*	*							A1	*	*		
*Knauf Ceiling Roll	135	Mineral Wool	Knauf Insulation	FTC17-006	2017/10/18	A/A1/1	*	*							A1	*	*		
*Starfibre	135	Polyester fibre	D&D Roof Insulations	FTC 15-142	2016/01/05	B/B2/2 H	*	*											
*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	*	*											
*Thermo-Floc Glass Wool Loose	135	Glass Wool	Fibreglass & Allied ProD	BCT-210520-00085B	2021/06/15	A/A1/1	*	*											

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Table 2: BULK INSULATION (Rigid Faced & Un-faced) Database [Installed as suspended ceiling]

PRODUCT/ BRAND NAME	THICKNESS (mm)	TYPE	INSULATION MANUFACTURER / SOLE DISTRIBUTOR	REPORT NUMBER	REPORT DATE	SANS 428 CLASSIFICATION							SANS 53501-1 CLASSIFICATION 2024						
						CLASSIFICATION	SANS 10177-5	SANS 10177-10	SANS 10177-11	HORIZONTAL (H)	VERTICAL (V)	UNSPRINKLERED	SPRINKLERED	CLASSIFICATION	SANS 11820	SANS 1743	SANS 11925-2	SANS 53823	
*LiteSpan Ceiling Panel FRCel15	50 -100	EPS	Technopol SA	FTC18-284(2)	2019/02/05	B/B1/2/H only (USP)	*	*											
*LiteSpan Ceiling Panel FRCel12	50 -120	EPS	Technopol SA	FTC19-117	2019/08/08	B/B1/2/H only (SP & USP)	*	*											
*Polycool Faced	70	EPS	Technopol SA	FTC17-104	2017/07/24	B/B1/2/H only (USP)	*	*											

Table 3: BULK INSULATION - Rigid un-faced Database [Generally installed in cavity walls]

*Cavitylite/Cavitybatt	102	Glass Wool	Saint-Gobain Isover	FTC17-196 R1	2017/10/12	A/A1/1	*	*											
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Table 4: BULK INSULATION (Rigid un-faced) Database [Generally installed under roof & over purlins and/or side cladding in buildings]

*FRCel 18DV	120	EPS	Technopol SA	FTC19-194	2019/10/21	B/B1/2/H (SP & USP)	*	*	*	*	*	*	*						
*FRCel 20DV	60	EPS	Technopol SA		2023/08/04									B-s1,d0				*	*
*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)	*	*	*	*	*	*	*	B-s1,d1			*	*	*

Table 5: COMPOSITE BULK INSULATION – Rigid (Faced) Database [Generally installed under roof & over purlins and/or side cladding in buildings]

*Acoustisorb Black/ White/Grey	50	Polyester	Brits Nonwoven	FTC19-074	2019/06/14	B/B1/2/H&V (SP & USP)	*	*	*	*	*	*	*						
*Factoryboard WMF	50	Glass Wool	Saint-Gobain Isover	FTC10-169	2011/03/02	B/B1/2/H&V (SP & USP)	*	*	*	*	*	*	*						
*Factoryboard Foil Faced	50	Glass Wool	Saint-Gobain Isover	FTC10-132	2010/12/01	B/B1/2/H&V (SP & USP)	*	*	*	*	*	*	*						
*Supacool White Faced	50	Faced/EPS	Technopol	FTC16-208(R1)	2016/11/16	B/B1/2/H only (USP)	*	*	*	*	*	*	*						

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Table 6: COMPOSITE BULK INSULATION – Flexible (Faced) Database [Generally installed under roof & over purlins and/or side cladding in buildings]

PRODUCT/ BRAND NAME	THICKNESS (mm)	TYPE	INSULATION MANUFACTURER / SOLE DISTRIBUTOR	REPORT NUMBER	REPORT DATE	SANS 428 CLASSIFICATION							SANS 53501-1 CLASSIFICATION 2024					
						CLASSIFICATION	SANS 10177-5	SANS 10177-10	SANS 10177-11	HORIZONTAL (H)	VERTICAL (V)	UNSPRINKLERED	SPRINKLERED	CLASSIFICATION	SANS 11820	SANS 1743	SANS 11925-2	SANS 53823
*Acoustisorb Black Liner	50	Polyester	Brits Nonwoven	FTC19-074	2019/06/14	B/B1/2/H&V (SP & USP)	*	*	*	*	*	*	*					
*Alucool FKP	135	Glass Wool	ATI	FTC19-019	2019/04/15	A/A1/1	*	*										
*Factorylite WMF	135	Glass Wool	Saint-Gobain Isover	BTC19-00052A	2019/02/27	A/A1/1	*	*										
*Factorylite Foil Faced	135	Glass Wool	Saint-Gobain Isover	BTC19-00052B	2019/02/27	A/A1/1	*	*										
*Ductwrap Foil Faced	50	Glass Wool	Saint-Gobain Isover	FTC18-149	2018/08/27	A/A1/1	*	*										
*Isover Sonic Liner Faced	50	Glass Wool	Saint-Gobain Isover	FTC18-144	2018/07/30	A/A1/1	*	*										
*MBI Foil Faced	135	Glass Wool	Brits Non-woven/Granric	FTC18-222	2023/08/28	A/A1/1	*	*										
*MBI W White Faced	135	Glass Wool	Brits Non-woven/Granric	FTC18-223	2023/08/28	A/A1/1	*	*										
MBI White WMF Coated	75	Glass Wool	Brits Non-woven/Granric	FTC15-053 R1	2015/08/04	A/A1/1	*	*										
*Starlite White Faced	135	Glass Wool	D & D Roof Insulations	FTC19-041	2019/05/27	A/A1/1	*	*										
*Starlite Foil Faced	100	Glass Wool	D & D Roof Insulations	FTC10-133 a	2012/12/11	A/A1/1	*	*										
*Starlite PH White	100	Phenolic	D & D Roof Insulations	FTC12-057a	2012/08/29	A /A1/1	*	*										
*Starlite PH Foil	50	Phenolic	D & D Roof Insulations	FTC12-057b	2012/08/29	A /A1/1	*	*										
*Starlite Foil (AFT Faced)	100	Glass Wool	D & D Roof Insulations	FTC12-130	2012/12/03	A /A1/1	*	*										



Table 7: REFLECTIVE FOIL LAMINATES used as RADIANT BARRIER/UNDERTILE MEMBRANE
[Generally installed under roof & over rafters in residential applications]

PRODUCT/ BRAND NAME	TYPE	INSULATION MANUFACTURER / SOLE DISTRIBUTOR	REPORT NUMBER	REPORT DATE	SANS 428 CLASSIFICATION							SANS 53501-1 CLASSIFICATION 2024						
					CLASSIFICATION	SANS 10177-5	SANS 10177-10	SANS 10177-11	HORIZONTAL (H)	VERTICAL (V)	UNSPRINKLERED	SPRINKLERED	CLASSIFICATION	SANS 11820	SANS 17143	SANS 11925-2	SANS 53823	
*Absto DFR251 Foil Scrim Facing	Foil	Absto Industrial Supplies	FTC 19-122	2019/08/08	A/A1/1	*	*		*	*								
*Absto DFR251 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	*	*		*									
*Absto WP250 White Scrim Facing	Foil	Absto Industrial Supplies	FTC 21-052	2021/07/27	B/B1/2 H only	*	*		*									
*Alucushion Domestic	MPET	Alucushion (Pty) Ltd	FTC 21-278	2022/03/23	B/B1/2 H only	*	*		*									
*Alulite	LDPE	ATI	FTC 16-083	2016/07/20	B/B1/2 H only	*	*		*									
*Envirotuff 201FR	Foil	Rhino Plastics (Pty) Ltd	FTC 18-100	2018/07/20	B/B3/3 H only	*	*		*									
*Envirotuff 202ECO	Foil	Rhino Plastics (Pty) Ltd	FTC 16-008 R1	2016/04/08	B/B1/2 H only	*	*		*									
*Envirotuff 202FR	Foil	Rhino Plastics (Pty) Ltd	FTC 18-329 (2)	2019/03/18	A/A1/1	*	*		*	*		B-s1,d1	*	*	*	*	*	*
*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	*	*		*	*		B-s1,d1	*	*	*	*	*	*
*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	*	*		*	*		B-s1,d1	*	*	*	*	*	*
*Sisalation 405	Foil	Afripack Coatings	BCT17071900029R2	2017/10/01	B/B1/2 H only	*	*		*									



Table 8: REFLECTIVE FOIL LAMINATES
[Generally installed over purlins and/or side cladding in Industrial Buildings]

PRODUCT/ BRAND NAME	TYPE	INSULATION MANUFACTURER / SOLE DISTRIBUTOR	REPORT NUMBER	REPORT DATE	SANS 428 CLASSIFICATION								SANS 53501-1 CLASSIFICATION 2024					
					CLASSIFICATION	SANS 10177-5	SANS 10177-10	SANS 10177-11	HORIZONTAL (H)	VERTICAL (V)	UNSPRINKLERED	SPRINKLERED	CLASSIFICATION	SANS 11820	SANS 17143	SANS 11925-2	SANS 53823	
*Alububble D10 Code 2906 Single	MPET	Africa Thermal Ins. ATI	FTC18-101	2018/07/05	B/B1/2/H only (SP & USP)	*	*	*	*		*	*						
*Alububble D10 Code 1983 Double	LDPE	Africa Thermal Ins. ATI	FTC16-066	2016/07/20	B/B1/2/H only (SP & USP)	*	*	*	*		*	*						
*Alububble D10 Code 1983 Double	LDPE	Africa Thermal Ins. ATI	FTC17-250	2018/02/05	B/B1/2/V (USP)	*	*	*		*	*							
*Alubrite	Foil	Africa Thermal Ins. ATI	FTC22-154	2023/02/17	A/A1/1	*	*											
*Alufoil FR-LI Light Industrial	Foil	Alucushion (Pty) Ltd	FTC 21-282	2022/03/25	B/B1/2/H (SP & USP)	*	*	*	*		*	*						
*Alucushion FR D10 Code 1983	MPET	Alucushion (Pty) Ltd	FTC 21-277	2022/03/22	B/B1/2/H (SP & USP)	*	*	*	*		*	*						
*Alucushion D10 Code 2906 FR	MPET	Alucushion (Pty) Ltd	FTC21-153	2021/11/03	B/B1/2/H only (SP & USP)	*	*	*	*		*	*						
*Alufoil FR-HI Heavy Industrial	Foil	Alucushion (Pty) Ltd	FTC21-158	2021/11/02	B/B1/2/H only (SP & USP)	*	*	*	*		*	*						
*Envirotuff 202FR	Foil	Rhino Plastics (Pty) Ltd	FTC18-329 (2)	2019/03/18	A/A1/1	*	*	*	*	*	*	*						
*Envirotuff 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	*	*	*	*	*	*	*						
*Sisalation Fireshield NC 502 D/S	Foil	Afripack Coatings	FTC17-284	2018/03/29	A/A1/1	*	*	*	*	*	*	*						
*Sisalation FR 405	Foil	Afripack Coatings	FTC22-169	2022/10/10	A/A1/1	*	*	*	*		*	*						
*Sisalation FR 430	Foil	Afripack Coatings	FTC20-238	2021/02/17	B/B1/2/H&V (SP & USP)	*	*	*	*		*	*						



Table 9: ALTERNATIVE COMPOSITE INSULATION SYSTEMS (ACIS): NON-STANDARD PRODUCTS

WARNING - NON-STANDARD PRODUCTS - WARNING

DO NOT 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 *Energy usage in buildings*, unless 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.

PRODUCT/ BRAND NAME	TYPE	INSULATION MANUFACTURER / SOLE DISTRIBUTOR	REPORT NUMBER	REPORT DATE	SANS 428 CLASSIFICATION								SANS 53501-1 CLASSIFICATION 2024					
					CLASSIFICATION	SANS 10177-5	SANS 10177-10	SANS 10177-11	HORIZONTAL (H)	VERTICAL (V)	UNSPRINKLERED	SPRINKLERED	CLASSIFICATION	SANS 11820	SANS 17143	SANS 11925-2	SANS 53823	
*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)	*	*	*	*		*							

Table 10: SPACER SYSTEMS
Generally installed under roof & on top of purlins

Insultrak & WF Starlite Insulation Spacer&Insulation	55	Insultrak CC	FTC22/042	2022/06/22	A/A1/1	*	*											
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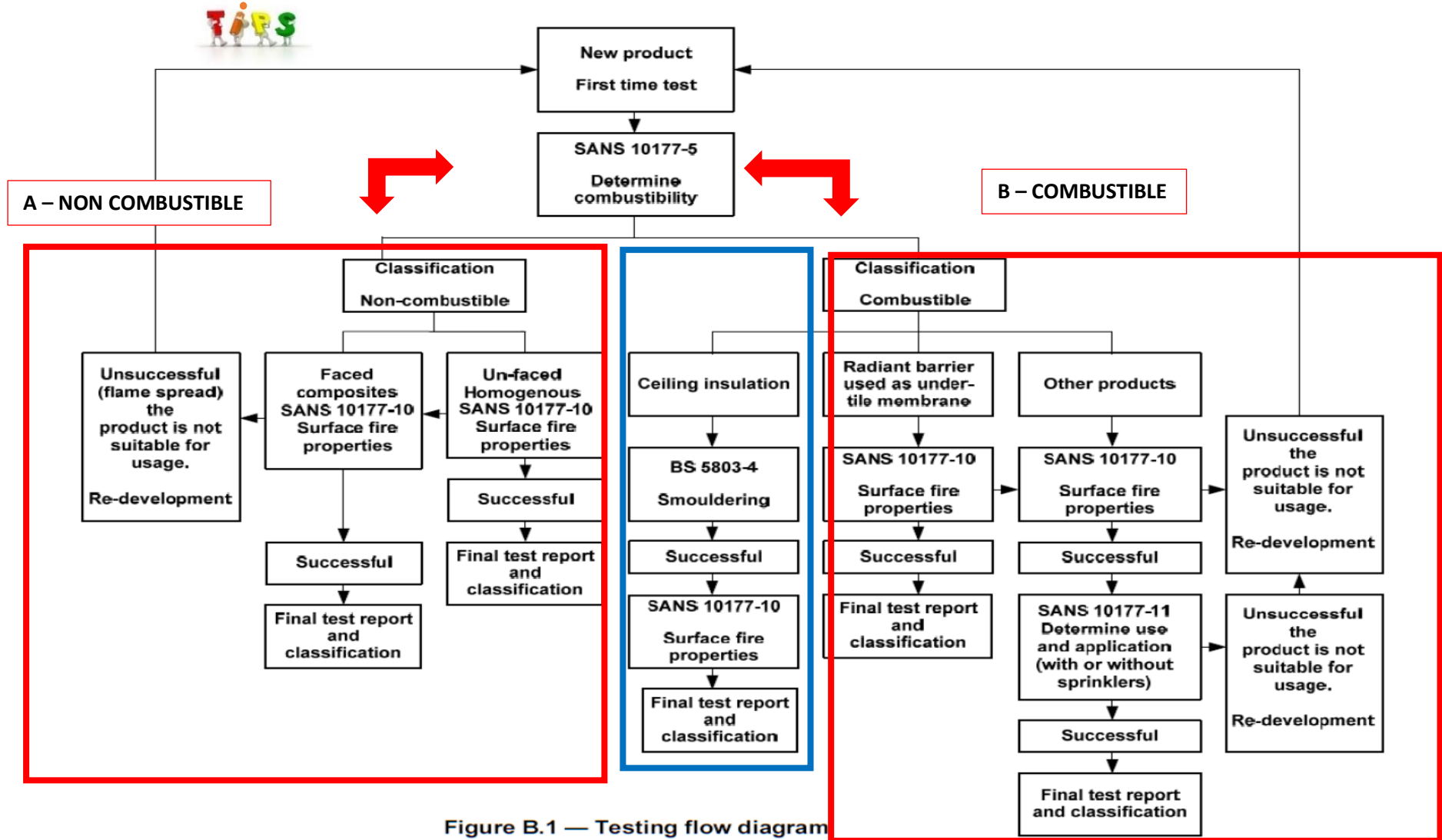


Figure B.1 — Testing flow diagram

Drg.933



Fire performance classification of thermal insulated building envelope systems in accordance with SANS 10400 Part T & SANS 428

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.

1. Classification Type Combustibility	Class	Description of materials behaviour and occupancies	2. Classification Type Surface Fire Properties	A1 or B1	No flame spread
	A	Non-combustible		A2 or B2	Low flame spread (no flaming droplets or burning brand)
	B	Combustible		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	Class of Occupancy	Type of Occupancy	Use
A1	Entertainment & Public Assembly	1	D2	Moderate risk industrial	2	H1	Hotel	1
A2	Theatrical & indoor sport	2	D3	Low risk industrial	3	H2	Dormitory	1
A3	Places of instruction	2	D4	Plant room	1	H3	Domestic residence	3
A4	Worship	2	E1	Place of detention	1	H4	Dwelling house	3
A5	Outdoor sport	4	E2	Hospital	1	H5	Hospitality	3
B1	High risk commercial	2	E3	Other institutional (residential)	1	J1	High risk storage	2
B2	Moderate risk commercial	2	E4	Health care	2	J2	Moderate risk storage	2
B3	Low risk commercial	3	F1	Large shop	3	J3	Low risk storage	3
C1	Exhibition hall	2	F2	Small shop	3	J4	Parking garage	4
C2	Museum	2	F3	Wholesalers' store	3			
D1	High risk industrial	2	G1	Offices	3			

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.

4. Permissible Application		5. Tested with sprinklers (SP) or without sprinklers (USP)	
Horizontal (under-roof) only	H	Not protected by a sprinkler system.	USP (Tested without Sprinklers)
Vertical (side cladding) only	V	Protected by a sprinkler system.	SP (Tested with Sprinklers)
Horizontal and vertical application	H & V		



Insulation products are classified according to harmonized classification and test methods in Euroclass A1, A2, B, C, D, E and F. Products classified in a given class are deemed to satisfy all the requirements of any lower (better) class. Products listed in A1 and A2 classes are non-combustible (cement, concrete, minerals, glass wool, fibreglass, rockwool, ceramic, etc.), materials certified from B to F are combustible in ascending order.

Class	Test	Classification Criteria	Additional Classification	Contribution to fire
A1	SANS 11820	$\Delta T \leq 30^\circ \text{C}$; and $\Delta m \leq 50\%$; and $t_f = 0$ (i.e. no sustained flaming)	-	Non-Combustible
	SANS 1743	$PCS \leq 2.0 \text{ MJ/kg}^a$ and $PCS \leq 2.0 \text{ MJ/kg}^{b,c}$ and $PCS \leq 1.4 \text{ MJ/m}^2^d$ and $PCS \leq 2.0 \text{ MJ/kg}^e$		No contribution to fire
A2	SANS 1182 or	$\Delta T \leq 50^\circ \text{C}$; and $\Delta m \leq 50\%$; and $t_f \leq 20 \text{ s}$	Smoke production ^f and Flaming droplets/particles ^g	Limited Combustible
	SANS 1743 and	$PCS \leq 3.0 \text{ MJ/kg}^a$ and $PCS \leq 4.0 \text{ MJ/m}^2^b$ and $PCS \leq 4.0 \text{ MJ/m}^2^d$ and $PCS \leq 3.0 \text{ MJ/kg}^e$		No contribution to fire
	SANS 53823 SBI	$FIGRA \leq 120 \text{ W/s}$; and $LFS < \text{edge of specimen}$; and $THR_{600s} \leq 7.5 \text{ MJ}$		No Flashover
B	SANS 53823 SBI	$FIGRA \leq 120 \text{ W/s}$; and $LFS < \text{edge of specimen}$; and $THR_{600s} \leq 7.5 \text{ MJ}$	Smoke production ^f and Flaming droplets/particles	Combustible materials
	SANS 11952-2	$F_s \leq 150\text{mm}$ within 60 s		No Flashover Very limited contribution to fire
C	SANS 53823 SBI	$FIGRA \leq 250 \text{ W/s}$; and $LFS < \text{edge of specimen}$; and $THR_{600s} \leq 15 \text{ MJ}$	Smoke production ^f and Flaming droplets/particles ^g	Flashover after 10 minutes
	SANS 11952-2	$F_s \leq 150\text{mm}$ within 60 s		Limited contribution to fire
D	SANS 53823 SBI	$FIGRA \leq 750 \text{ W/s}$	Smoke production ^f and Flaming droplets/particles ^g	Flashover before 10 min
	SANS 11952-2	$F_s \leq 150\text{mm}$ within 60 s		Medium contribution to fire
E	SANS 11952-2	$F_s \leq 150\text{mm}$ within 20 s	Flaming droplets/particles ^g	Flashover before 2 minutes
F		No performance determined		No Performance Determined

ADDITIONAL CLASSIFICATIONS EXPLAINED

All the materials classified A2, B, C, D & E to obtain an additional classification regarding the emission of smoke and the production of flaming droplets and/or particles.

Additional Class		Level definition		
“s” Smoke emission level: - values range from 1 (absent/weak) to 3 (high)	Smoke emission - during combustion	s	1	No smoke. Quantity/speed of emission absent or weak
			2	Limited smoke production and smoke increase. Quantity/speed of emission of average intensity
			3	Quantity/speed of emission of high intensity
“d” flaming Droplets and/or particles - values range from 0 (absent) to 2 (high)	Production of flaming droplets /particles - during combustion	d	0	No dripping
			1	Slow dripping
			2	High dripping

See SANS 53501-1 or SANS 10400-T:2024 Ed 5 Fire protection for full explanation of classification

SANS 10400-A - Regulation A20 Classification and Designation of Occupancies relevant to SANS 10400-T Fire Protection	Reaction to fire classification SANS 53501-1 The classification indicated or better				SANS 10400-A - Regulation A20 Classification and Designation of Occupancies relevant to SANS 10400-T Fire Protection	Reaction to fire classification SANS 53501-1 The classification indicated or better			
	Class of Occupancy	Single storey	Double storey	3 storeys or more		Class of Occupancy	Single storey	Double storey	3 storeys or more
Entertainment and public assembly	A1	A2-s1,d0	A2-s1,d0	A2-s1,d0	Large shop	F1	D-s3,d2	C- s3,d1	A2-s1,d0
Theatrical and indoor sport	A2	D-s3,d2	C- s3,d2	A2-s1,d0	Small shop	F2	D-s3,d2	C- s3,d2	A2-s1,d0
Places of instruction	A3	D-s3,d2	C- s3,d2	B-s3,d2	Wholesalers' store	F3	D-s3,d2	C- s3,d2	A2-s1,d0
Worship	A4	D-s3,d2	C- s3,d2	A2-s1,d0	Offices	G1	E-s3,d2	D-s3,d2	A2-s1,d0
Outdoor sport	A5	E-s3,d2	D-s3,d2	A2-s1,d0	Hotel	H1	A2-s1,d0	A2-s1,d0	A2-s1,d0
High risk commercial service	B1	A2-s1,d0	A2-s1,d0	A2-s1,d0	Dormitory	H2	A2-s1,d0	A2-s1,d0	A2-s1,d0
Moderate risk commercial service	B2	D-s3,d2	C- s3,d2	A2-s1,d0	Domestic residence	H3	E-s3,d2	D-s3,d2	A2-s1,d0
Low risk commercial service	B3	E-s3,d2	D-s3,d2	A2-s1,d0	Dwelling house	H4	E-s3,d2	D-s3,d2	A2-s1,d0
Exhibition hall	C1	D-s3,d2	C- s3,d2	A2-s1,d0	Hospitality	H5	D-s3,d2	C- s3,d2	A2-s1,d0
Museum	C2	D-s3,d2	C- s3,d2	A2-s1,d0	High-risk storage	J1	A2-s1,d0	A2-s1,d0	A2-s1,d0
High -risk industrial	D1	A2-s1,d0	A2-s1,d0	A2-s1,d0	Moderate-risk storage	J2	C- s3,d2	B-s3,d2	A2-s1,d0
Moderate-risk industrial	D2	D-s3,d2	C- s3,d1	A2-s1,d0	Low-risk storage	J3	E-s3,d2	D-s3,d2	A2-s1,d0
Low-risk industrial	D3	E-s3,d2	D-s3,d2	A2-s1,d0	Parking garage	J4	D-s3,d2	C- s3,d2	A2-s1,d0
Plant room	D4	A2-s1,d0	A2-s1,d0	A2-s1,d0	Notification: In the revision of SANS 10400-T Fire Protection, SANS 428 will be replaced with SANS 53501-1 after 31 December 2024.				
Place of detention	E1	A2-s1,d0	A2-s1,d0	A2-s1,d0					
Hospital	E2	A2-s1,d0	A2-s1,d0	A2-s1,d0					
Other institutional (residential)	E3	A2-s1,d0	A2-s1,d0	A2-s1,d0					
Health care	E4	A2-s1,d0	A2-s1,d0	A2-s1,d0					

Notes:
 A1 to F refer to the Fire Class determined in accordance with SANS 53501-1. Building Occupancy Classes A1, B1, D1, D4, E1, E2, E3, E4, H1, H2 and J1 are limited to Classification A2-s1,d0 or better.
 All the materials classified A2, B, C, D, E obtain an additional classification regarding the emission of smoke and the production of flaming droplets and/or particles.
 "s" Smoke emission level: values range from 1 (absent/weak) to 3 (high)
 "d" Flaming droplets and/or particles: values range from 0 (absent) to 2 (high)

Example of fire classes & criteria – in addition smoke & droplets

The main part of the classification is its letter – A1, A2, B, C, D, F and F.

A1 is the highest level of performance, with F the lowest performance level.



There is a smoke classification of S1 (absent/ weak), S2 or 3 (high)

A2 – s1, d0



There is a classification of flaming droplets of d0, d1 or d2.

d0 is the highest level of performance (absent) and d2 is the lowest performance level (high).