

DENSIQ[®]

Ceramic material

Standard types, areas of application and dimensions:

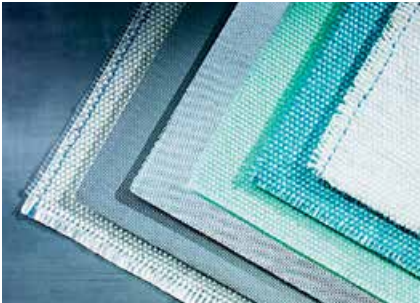
Tapes, woven

Woven tapes are mainly used for insulating and sealing flanges, lids and hatches at high temperatures. Ladder tapes comprising two woven tapes with a centre section comprising transverse yarn for mounting over bolts can also be supplied.



Fabric

Fabric is used preferably for insulating machine parts or to provide fire, welding or spark protection when carrying out hot work or grinding. Fabric can be supplied either by the metre or as finished, hemmed welding and spark protection cloths.



Braids, square

Square braids are used for sealing and insulation of furnaces, boilers, chimneys and inspection hatches. These braids are very dimensionally stable and are normally fitted in grooves.



Yarn, twisted

Twisted yarn is more malleable than square braids, and so it can be used for sealing warped and/or uneven flanges in flue gas ducts, chimneys, furnaces etc. Can also be used as an insulating material for pipes, ducts, ladder, furnaces, boilers, flue gas bellows etc.

Some dimensions and qualities are braided as standard with a cover braid made of the same base material.



Twisted yarn



Braided yarn

Chemical analysis:

IsoGlas, IsoTherm 800, IsoTherm 1000 (E-glass fibre)	
Substance	Content
SiO ₂	50.0-56.0%
Al ₂ O ₃	12.0-16.0%
CaO	16.0-25.0%
MgO	≤6.0%
B ₂ O ₃	6.0-13.0%
F	trace
Na ₂ O	trace
K ₂ O	trace
Fe ₂ O ₃	trace

IsoTherm ST (silicate fibre)	
Substance	Content
SiO ₂	96.0%
Al ₂ O ₃	3.0%
Other	CaO, MgO, B ₂ O ₃

Technical data:

	IsoGlas	IsoTherm 800*	IsoTherm ST
Working temperature:	+450°C	+700°C	+1050°C
Short-term max. temp.:	+550°C	+800°C	+1100°C
Fibre diameter:	6-10 µm	6-10 µm	5-9 µm
Ignition loss:	at +500°C: <1.5%	at +800°C: <3%	at +1000°C: <2.5%
Thermal conductivity:	at +400°C: 0.13 W/m ² K at +500°C: 0.16 W/m ² K	at +500°C: 0.16 W/m ² K at +600°C: 0.19 W/m ² K	at +700°C: 0.14 W/m ² K at +800°C: 0.18 W/m ² K
Shrinkage:	at +500°C: 0%	at +700°C: 0%	at +1000°C: 1%
Non-combustable as per DIN 4102:	yes	yes	yes
Hydrolytic properties as per DIN 12111 Class I:	yes	yes	yes

*) IsoTherm 1000 has a max. operating temperature of +1000°C, other values the same as IsoTherm 800.

Tape, thickness 2 mm								
IsoGlas			IsoTherm 800			IsoTherm ST		
Width mm	Length m/pack	Part no.	Width mm	Length m/pack	Part no.	Width mm	Length m/pack	Part no.
15	150	2661015	15	150	(2671015)	-	-	-
20	150	2661020	20	150	2671020	20	150	2691020
30	50	2661030	30	50	2671030	30	50	2691030
40	50	2661040	40	50	2671040	-	-	-
50	50	2661050	50	50	2671050	50	50	2691050
60	50	2661060	60	50	(2671060)	-	-	-
80	50	2661080	80	50	(2671080)	-	-	-
100	50	2661100	100	50	2671100	100	50	2691100
120	50	(2661120)	120	50	(2671120)	-	-	-

Tape, thickness 4,5 mm								
IsoGlas			IsoTherm 800			IsoTherm ST		
Width mm	Length m/pack	Part no.	Width mm	Length m/pack	Part no.	Width mm	Length m/pack	Part no.
-	-	-	30	25	2671032	30	25	2691032
-	-	-	40	25	2671047	-	-	-
-	-	-	45	25	2671057	-	-	-
-	-	-	-	-	-	50	25	2691052

Laddertape, thickness 3 mm								
IsoGlas			IsoTherm 800			IsoTherm ST		
Width mm	Length m/pack	Part no.	Width mm	Length m/pack	Part no.	Width mm	Length m/pack	Part no.
-	-	-	25	50	2671027	-	-	-
-	-	-	40	50	2671042	-	-	-
-	-	-	50	50	2671052	-	-	-

Fabric											
IsoGlas				IsoTherm 800				IsoTherm ST			
Thickness mm	Width mm	Length m/roll	Part no.	Thickness mm	Width mm	Length m/roll	Part no.	Thickness mm	Width mm	Length m/roll	Part no.
-	-	-	-	1.00	1000	50	2674010	-	-	-	-
-	-	-	-	1.80	1000	50	2670007	-	-	-	-

Fire and spark protection blankets		
Dimensions mm	Part no. IsoTherm 800	Part no. IsoTherm 1000
500 x 500 x 2.0	-	2675101
1000 x 1000 x 2.0	2675802	2675102
1000 x 2000 x 2.0	2675803	2675103

The stated limit values apply under favourable conditions.
 Do not utilise more than one maximum value at a time.
 If in doubt please contact us, we will be happy to offer advice.

Braid, square								
IsoGlas			IsoTherm 800			IsoTherm ST		
Dimensions mm	Length m/pack	Part no.	Dimensions mm	Length m/pack	Part no.	Dimensions mm	Length m/pack	Part no.
6	200	26620060	6	200	26720060	6	200	2692006
8	100	2662008	8	100	26720080	8	100	2692008
10	100	26620100	10	100	26720100	10	100	26920100
12	50	26620120	12	50	26720120	12	50	2692012
15	50	26620150	15	50	26720150	15	50	2692015
18	50	(2662018)	18	50	(2672018)	18	50	(2692018)
20	50	26620200	20	50	26720200	20	50	26920200
25	25	26620250	25	25	2672026	25	25	2692025
30	25	26620300	30	25	2672030	30	25	2692030
35	20	(2662035)	-	-	-	40	20	(2692040)
40	20	2662040	40	20	2672040	-	-	-
50	15	(2662050)	-	-	-	50	15	(2692050)

Yarn, twisted								
IsoGlas			IsoTherm 800			IsoTherm ST		
Dimensions mm	Length m/pack	Part no.	Dimensions mm	Length m/pack	Part no.	Dimensions mm	Length m/pack	Part no.
3	200	2663003	3	200	2673003	3	200	(2693003)
5	200	2663005	5	200	2673005	5	200	(2693005)
6	100	26630060	6	100	26730060	6	100	26930060*
8	100	2663008	8	100	2673008	8	100	2693008*
10	100	26630101	10	100	26730101	10	100	26930100*
12	50	26630120	12	50	26730120	12	50	26930120*
15	50	26630150	15	50	26730150	15	50	26930150*
18	50	(2663018)	18	50	(2673018)	-	-	-
20	50	26630200	20	50	26730200	20	50	26930200*
25	25	26630250*	25	25	(2673025)	-	-	-
30	25	26630300*	30	25	(2673030)	30	50	2693030*

Part numbers marked *) are supplied braided.
 Part numbers in brackets are special dimensions requiring a minimum order quantity.

Special versions:

DENSIQ can also produce custom special solutions. These require a minimum order quantity.

- Braid: Round braided version.
- Graphite coating: All types of yarn and braid can be supplied with surface graphite coating.
- Tape: Thicknesses 3 mm, 4-5 mm and 9-10 mm can also be supplied. The tapes are also available with self-adhesive backing tape.
- Fabric: Coated with aluminium foil, alufix or silicone rubber.
- Braided sleeves: For insulation of pipes and hoses.
- Fleece/needle mat: When a thick insulation blanket is required.

The stated limit values apply under favourable conditions.
 Do not utilise more than one maximum value at a time.
 If in doubt please contact us, we will be happy to offer advice.