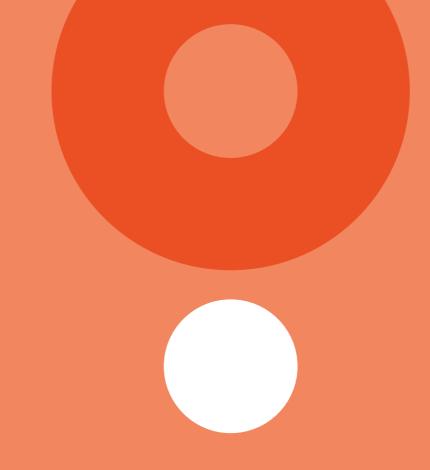
#### **GOIZEA WORKS**



- 1. Kathu. Northern Cape, South Africa.
- 2. Ilanga. Upington. Northern Cape, South Africa.
- 3. Noor III. Ouarzazate, Morocco.
- 4. Shagaya. Kuwait City.
- 5. Ashalim. Beer Sheva, Israel.
- 6. Kaxu Solar One. Pofadder, South Africa.
- 7. Xina Solar One. Northern Cape, South Africa.
- 8. Extresol 1. Badajoz, Spain.
- 9. Extresol 2. Badajoz, Spain.
- 10. Samcasol 1. Badajoz, Spain.

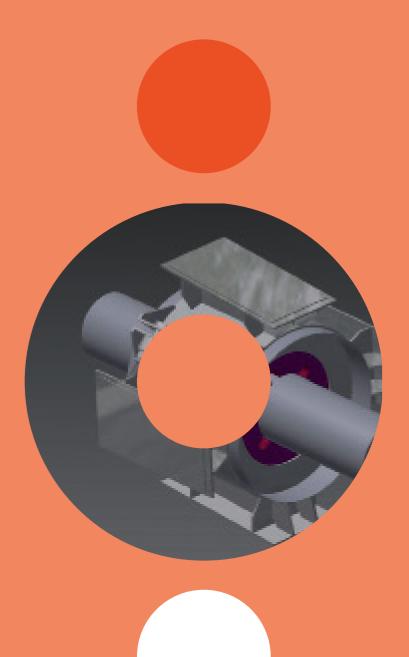
- 11. Samcasol 2. Mérida, Spain.
- 12. Noor I. Ouarzazate, Morocco.
- 13. Solaben 2. Logrosan, Cáceres, Spain.
- 14. Solaben 3. Logrosan, Cáceres, Spain.
- 15. UTE Guzman. Palma del Río, Córdoba, Spain.
- 16. Termosol 1. Navalvillar de Pela, Badajoz, Spain.
- 17. Termosol 2. Navalvillar de Pela, Badajoz, Spain.
- 18. Aste 1A. Alcázar de San Juan, Ciudad Real, Spain.
- 19. Aste 1B. Alcázar de San Juan, Ciudad Real, Spain.
- 20. Moron. Morón de la Frontera, Sevilla, Spain.





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Calcium Silicate pre-insulated pipe supports



## GOIZEA: EXPERT FOR EXPERTS

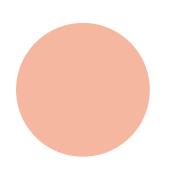
GOIZEA has long been recognized as the leading worldwide specialist in pipe support technologies. Starting in 1983 as representative for standardized pipe supports manufacturers, the company grew fast and developed its own products, becoming the international market leader in the late 90s.

This leadership is a result of our priorities: the very best product quality and intense technological development, ensuring technical performance of all our calcium silicate categories.

GOIZEA supplies Calcium silicate Supports offering superb performance up to 1000°C.











# CALCIUM SILICATE – HEAT LOSSES CONTROL, HIGH STRENGTH

Our calcium silicate products offer very stable thermal conductivity values over a wide range of temperatures. Our best products can be used continuously up to 1000°C without deterioration or excessive shrinkage.

Almost any type of thermal equipment can be built and insulated at the same time, due to calcium silicate's special properties: its high compressive and flexural strength. For this reason, our supports can be used as structural components in an assembly.

## **MATERIAL PROPERTIES**& CHARACTERISTICS

- Excellent thermal conductivity values that remain stable over a wide range of temperatures up to 1000 °C
- · Excellent machineability
- Excellent compressive and flexural strength
- Wide range of densities
- · Insoluble in water
- Excellent electrical insulating properties when dry
- · Resistant to oils, weak alkalis and many other chemicals





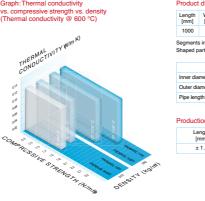


MONOLUX

900 - 1000 °C

#### **PROMASIL**

Brand			PROMASIL®				
Grade			-950KS	-1000	-1000P	-1100	
Colour			White	White	White	White	
Classification temperature		°C	950	1000	1000	1100	
Bulk density		kg/m <sup>3</sup>	245	245	285	285	
Reversible thermal expansion		m/m K	5.4x10 <sup>-6</sup>	5.4x10 <sup>-6</sup>	5.4x10 <sup>-6</sup>	5.5x10 <sup>-6</sup>	
Cold compressive strength		N/mm <sup>2</sup>	1.5	1.5	2	2.5	
Linear shrinkage	@ 1000 °C, 12 h @ 1050 °C, 12 h	%	1.5	1.3	1.3	- 1.5	
Thermal conductivity	200 °C 400 °C 600 °C 800 °C	W/m K W/m K W/m K W/m K	0.08 0.10 0.12 0.14	0.08 0.10 0.12 0.14	0.09 0.10 0.12 0.14	0.09 0.10 0.12 0.15	
Specific heat capacity @ 400 °C		kJ/kg K	1.03	1.03	1.03	1.05	
Protective gas-resistance			CO, NH,, H,, CH,, N, atmosphere				



Brand		MONOLUX®		
Grade		-500	-800	
Colour		White/beige	White/beige	
Building material class (DIN 4102)		A1, Non-combustible	A1, Non-combustible	
Classification temperature	°C	900	1000	
Nominal density	kg/m³	770	950	
Cold compressive strength	N/mm²	13	27	
Bending strength	N/mm²	7	10	
Shrinkage @ CT, 12 h	%	0.4	0.4	
Thermal conductivity  200 °C mean  400 °C mean  600 °C mean  800 °C mean	W/m K W/m K W/m K W/m K	0.21 0.23 0.25 0.27	0.22 0.24 0.25 0.28	
Specific heat capacity	kJ/kg K	0.96	1.03	

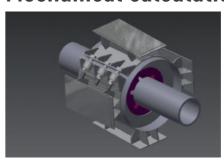
Graph: Thermal conductivity	Product dimensions & size availability					
vs. bending strength vs. density (Thermal conductivity @ 200 °C)		Length [mm]	Width [mm]	Thickness [mm]		
, a K9	MONOLUX®-500	2440	1220	12.7-19.1-25.4 31.8-38.1-50.8		
1 SY WITH	MONOLUX®-800	2440	1220	12.7-20-25-30-50		
THERMALTVITY WITH KO	Other sizes and sha		s are avail	able on request.		
0.50	Length [mm]			±5.0		
0.5	Width [mm]	Width [mm]		±5.0		
25	Thickness [mm]		+0/-0.8			
BEADONG STAFF						

#### **SERVICES**

### **Engineering & Field Services & Manufacturing**

#### **ENGINEERING**

#### Mechanical calculation



#### **Ad Hoc Design**



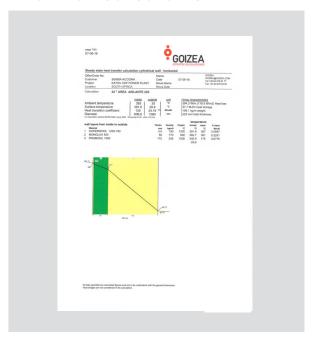
#### MANUFACTURING

Our Manufacturing is according to the specific material needs of our customers.

**Standard material**; Base Clamps and Structural Steel: S275JR; Calcium Silicate Rings: Monolux and/or Promasil;

Neoprene: Neoprene 40 SH; Stainless Steel Protection Shield: A240 TP 30 4; Bolts (DIN 931), nuts (DIN 934) & spring washers (DIN 6796) Grade 8.8 according DIN267 & safety nut (DIN 7967).

#### **Thermal Calculation**



#### **3D Model integration**



#### FIELD SERVICE

Please do not hesitate to contact us for your field service needs. If you:

- are planning any maintenance activity that requires additional assistance with pipe support installation/maintenance, or
- need unexpected repair works or replacements
   we are your partner.

GOIZEA provides high quality pipe support solutions with full guarantee.