

CQ 100 CQ 100 AL

DOP 56

DOP 57

MW - EN 14303

RI
SE

Research Institutes
of Sweden



TERMOLAN

ISOLAMENTOS TERMO-ACÚSTICOS, S.A.



Protection against fire



Thermal insulation



Acoustical insulation

DEFINITION:

Pipe sections of uniform thickness cutted from blocks, made of stone wool fibres bonded with synthetic binder, without facing- CQ 100 - or aluminium faced - CQ 100 AL.

APPLICATIONS:

Multiple applications as thermal (both hot and cold) and acoustical insulation of pipes for steam, fluid transport pipe work, central heating and air conditioning systems. Product also ideal for acoustical insulation of water evacuation pipes.

BENEFITS:

- Easy and quick application;
- High insulation performances;
- Very good mechanical performance;
- Fire safety;
- Chemically neutral and non corrosive;
- Excellent water behaviour;
- Inert product respecting the environment (CFC and HCFC free).

PRESENTATION:

Pipe sections. Options:

THICKNESS (mm) [NP EN 823]	DIMENSIONS (mm) [NP EN 822] / [EN 13467]
25 to 100	1200xΦ*

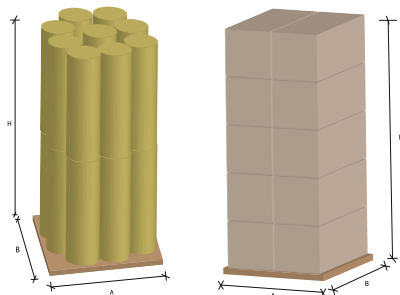
* Φ are presented in MANUFACTURING DIAMETERS

Tolerances:

THICKNESS AND DIAMETER: CLASSES T8- T9
LENGTH: ± 5mm

PACKAGING:

Pipe sections in retractile plastic bags or cardboard boxes. Geometry (AxBxH):



PHYSICAL PROPERTIES OF MATERIALS

NOMINAL DENSITY

100 kg/m³

EN 13470
ASTM C302

MAXIMUM SERVICE TEMPERATURE

ST(+) = 500 °C

NOTE: The service temperature of the aluminum facing must not exceed 90 ° C.

EN 14706
ASTM C447
ASTM C411

SPECIFIC HEAT FACTOR

c = 0.84 kJ/kg.°C

MANUFACTURING DIAMETERS, Φ

NP EN 823
EN 13467

DIAMETER		THICKNESS (mm)								
(mm)	(in)	25	30	40	50	60	70	80	90	100
18	3/8"	○	○	○	○	○	○	○	○	○
22	1/2"	○	○	○	○	○	○	○	○	○
27	3/4"	○	○	○	○	○	○	○	○	○
34	1"	○	○	○	○	○	○	○	○	○
42	1 1/4"	○	○	○	○	○	○	○	○	○
49	1 1/2"	○	○	○	○	○	○	○	○	○
60	2"	○	○	○	○	○	○	○	○	○
76	2 1/2"	○	○	○	○	○	○	○	○	○
89	3"	○	○	○	○	○	○	○	○	○
102	3 1/2"	○	○	○	○	○	○	○	○	○
114	4"	○	○	○	○	○	○	○	○	○
140	5"	○	○	○	○	○	○	○	○	○
169	6"	×	○	○	○	○	○	○	○	○
219	8"	×	○	○	○	○	○	○	○	○

LEGEND

- - Manufacturing in pipe sections
- - Manufacturing in cutted pipe sections
- ×

- Not manufactured



PHYSICAL PROPERTIES OF MATERIALS

THERMAL CONDUCTIVITY, λ

EN ISO 8497
ASTM C335

MEAN TEMPERATURE(°C)	10	50	100	150	200	250	300	350	400
λ (W/m.K)	0.033	0.039	0.045	0.054	0.064	0.074	0.088	0.101	0.119
λ (kcal/h.m.K)	0.028	0.034	0.039	0.046	0.055	0.064	0.076	0.087	0.102

FIRE REACTION

EN 13501-1
ASTM E84

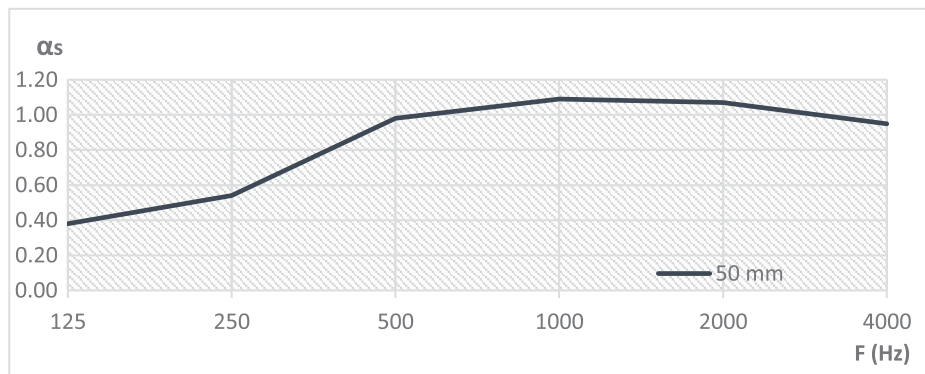
CQ 100 Incombustible - **EUROCLASS A1L**

CQ 100 AL Not determined - **NPD**

ACOUSTICAL ABSORPTION COEFFICIENT, α_s

EN ISO 354

THICKNESS 50 mm	F (Hz)	125	250	500	1000	2000	4000
α_s		0.38	0.54	0.98	1.09	1.07	0.95



EQUIVALENT ABSORPTION COEFFICIENT, α_w

EN ISO 11654

$\alpha_w = 0.90$ CLASS A

OTHER PROPERTIES

DIMENSIONAL STABILITY, $\Delta\epsilon$ [NP EN 1604]	23 °C / 90% HR: the relative deviations (length and width) doesn't exceed 0.0%
WATER ABSORPTION [ASTM C1104 / C1104M]	WS $\leq$ 1.00 kg/m ²
WATER VAPOUR PERMEABILITY [EN ISO 12572]	0.05 g/m ² /24h (depending of the aluminium facing)
WATER VAPOUR DIFFUSION FACTOR [EN ISO 14303]	$\mu = 1.00$
AIR FLOW RESISTIVITY [EN 29053]	AF > 80 kPa.s/m ² (for unfaced product)

