

Multibeton® XO

Concretes with guaranteed performance

Exposure class XO: no risk of corrosion or attack

Multibeton® XO is a concrete suitable for reinforced structures in exposure class XO in accordance with UNI EN 206 and UNI 11104.

	TYPES OF ENVIRONMENT	EXAMPLES OF USAGE	MAXIMUM W/C	MINIMUM RCK.
XO	<p>For concrete without reinforcement or metal inserts: all exposures except where there is freezing and thawing, abrasion or chemical attack.</p> <p>Concrete with reinforcement or metal inserts in a very dry environment.</p>	<p>Concrete inside buildings with very low relative air humidity. Non-reinforced concrete inside buildings. Non-reinforced concrete embedded in non-corrosive soil or in non-corrosive water.</p> <p>Non-reinforced concrete exposed to dry/wet cycles but not subjected to abrasion, frost or chemical attack.</p>	-	C12/15

Multibeton® XO is available in four versions with differing consistencies: S3, S4, S5 and SCC (self-compacting concrete) and with minimum strength class C12/15. The choice of consistency class is of fundamental importance to avoid internal/external cavities and depends on the difficulty of execution and the reliability of the workforce on site.

The strength class must be specified at the time of order in accordance with the design requirements.



**MULTIBETON®
XO-S3**



**MULTIBETON®
XO-S4**



**MULTIBETON®
XO-S5**



**SCC-MULTIBETON®
XO-SCC**

Table 1:

Example of the development over time of the compressive strength of **Multibeton® XO** C20/25 under laboratory conditions (20°C) and in a cold (5-10°C) or hot (30-35°C) climate.

TIME (DAYS)	COMPRESSIVE STRENGTH (MPa)		
	20°C	5-10°C	30-35°C
3	12	4	15
7	20	10	20
28	30	28	28

Note:

The above values were obtained with wet curing (R.H. = 95%) in the laboratory and on specimens compacted to minimise trapped air content. The values actually obtainable on site depend on the temperature and relative humidity conditions to which the structure is exposed, as well as the degree of compaction of the structure.

Attention: do not rely on these data alone to establish the formwork striking time.

Table 2:

Main physical and mechanical properties of **Multibeton® XO** (strength class C20/25)

EXPOSURE CLASS	STRENGT CLASS	CONSISTENCY CLASS	STANDARD HYGROMETRIC SHRINKAGE AFTER 6 MONTHS (R.H.=50%)	DYNAMIC ELASTIC MODULUS AT 28 DAYS	WATER PENETRATION IN ACCORD WITH UNI 12390-8	HEATING UNDER ADIABATIC CONDITIONS
			µm/m	MPa	mm	°C
XO	C20/25	S3, S4, S5	550	28000	35	22
		SCC	600	27000	35	24