



TDS 100Mpa UHPC Premix

Category	Description	Zhuliyuan UHPC
1.Common Characteristics	Maximum aggregate size (Dupper)	0.6 mm
	Fiber length (Lf)	12 mm
	Fiber Type	Steel fiber/organic fiber
	Pouring method	Self-leveling pouring
2.Heat treatment	Whether to perform heat treatment	\
	Heat treatment type	\
	Explanation	\
3.Properties of freshly mixed concrete	Slump (ASTM Cone)	250mm
	Operating time at 20°C	30-90 minutes
	Air content (entrained air)	2.0%
	Maintenance Conditions	Cure at 60°C for 48 hours
4.Mechanical properties after 28 days	Characteristic compressive strength grade	≥100MPa
	Tensile elastic limit eigenvalue (fctk,el)	≥6MPa
	Average tensile elastic limit (fctm,el)	≥7MPa

Category	Description	Zhuliyuan UHPC
	Tensile Behavior Grade	\
	Strength characteristic value after cracking (fct,fk)	3.5MPa
	Average strength after cracking (fct,fm)	4.8MPa
	Average elastic modulus (Ecm)	≥41GPa
5.Durability	90-day porosity	9%
	90-day gas permeability coefficient	$\leq 6.5 \times 10^{-17} \text{ m}^2$
	90-day chloride ion diffusion coefficient	$\leq 1.08 \times 10^{-12} \text{ m}^2/\text{s}$
6.Hardened state	density	2360 kg/m ³
	28 Antenna Expansion Coefficient	9.8μm/m/°C
	Total contraction amount over 90 days	≤ 1.0 mm/m
7.Others	Poisson's ratio	0.19
	Creep coefficient	0.4
	Fire resistance rating	A1