Concrete Degradation & Spalling Prevention System

Hybrid Sheet Reference Technical Data

structural TECHNOLOGIES

The tests conducted in Japan on Hybrid Sheet solutions with the primer and adhesive of SHO-BOND showed the following data.

A. Deteriorating factor invasion control performance

Amount of chloride ions transmitted:	0.005 g/m^2 (= 7.11 x 10^{-9} psi) or less per day
Amount of oxygen transmitted:	5.0 x 10^{-2} mg/cm^2 (= 7.11 x 10^{-7} psi) or less per day
Amount of vapor transmitted:	5.0 mg/cm^2 (= 7.11 x 10^{-5} psi) or less per day
Neutralization depth:	1 mm (= 0.04 inches) or less (neutralization stop performance test)

B. Concrete spalling-prevention performance

Load*:	1.5 kN (= 0.34kip) or more at a displacement of 10 mm (= 0.39 inches) or more (punching test)
Adhesive strength*:	1.5 N/mm^2 (= 1.5MPa) or more (adhesive strength test)
Elongation:	0.6 mm (= 0.02 inches) or more (crack follow-up performance test)

*Overlapped seam parts have the same performance

C. Durability performance

Adhesive strength after 2000 hours of accelerated weather resistance testing:	1.5 N/mm^2 (= 1.5MPa) or more and no change in appearance after 3000 hours
Adhesive strength after alkali resistance testing:	1.5 N/mm^2 (= 1.5MPa) or more and no change in appearance
Modulus of relative dynamic elasticity after 300 cycles of freezing and thawing testing:	60% or more