

RAPID SET CONCRETE PATCH MATERIALS APPROVAL PROCESS

Product must be evaluated by AASHTO's National Transportation Product Evaluation Program (NTPEP). The following are the minimum requirements for rapid set concrete patch materials:

HORIZONTAL FAST SET			AASHTO/ASTM Test Method
Initial Set		20-30 Minutes	T 131
Final Set		≤ 60 Minutes	
Compressive Strength	2 Hours	≥ 2,000psi	T 106 / C 109
	1 Day	≥ 4,000psi	
	7 Days	≥ 6,000psi	
Tensile Strength	28 Days	≥ 400psi	T 198
Flexural Strength	1 Day	≥ 600psi	C 78
	7 Days	≥ 750psi	
Slant Shear Bond Strength	1 Day	≥ 1,500psi	C 882*
	7 Days	≥ 2,500psi	
Resistance to Freeze Thaw (Applies to 3 rd Party Independent Testing)			
Freeze Thaw Mass Loss	300 cycles	≤ 6%	T 161/ C 666 (Procedure A)
Durability Factor		≥ 90%	
Chloride Ion Penetration	28 Days	≤ 2000 Coulombs	T 277/C 1202
VERTICAL/OVERHEAD PATCHES			AASHTO/ASTM Test Method
Initial Set		≤ 45 Minutes	T 131
Final Set		≤ 3 Hours	
Compressive Strength	4 Hours	≥ 200psi	T 106 / C 109
	1 Day	≥ 2500psi	
	7 Days	≥ 4000psi	
Slant Shear Bond Strength	7 Days	≥ 1750psi	C882
Resistance to Freeze Thaw (Applies to 3 rd Party Independent Testing)			
Freeze Thaw Mass Loss	300 cycles	≤ 6%	T 161/ C 666 (Procedure A)
Durability Factor		≥ 90%	
Chloride Ion Penetration	28 days	≤ 2000 Coulombs	T 277/ C 1202

* As modified by ASTM C928