



COMPARISON OF CHOCKFAST EPOXY GROUTS
TECHNICAL GUIDE #610

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DESCRIPTION

This bulletin compares the key physical properties and associated product information of the 3-component epoxy grouts within the ITW Performance Polymers product offerings.

PRODUCT INFORMATION

	CHOCKFAST RED	CHOCKFAST RED SG	ESCOWELD 7505E/7530	CHOCKFAST RED VERSAFLOW
UNIT COVERAGE	1.6 ft ³ (45.3 L)	1.6 ft ³ (45.3 L)	2.4 ft ³ (68 L)	2.2 ft ³ (61.7 L)
TYPICAL POUR DEPTH*	2 - 18 in* (50 - 450 mm)	1 - 4 in* (25 - 100 mm)	1½- 18 i * (38 - 450 mm)	1 - 8 in* (25 - 100 mm)
CURE TIME (APPROXIMATE)	60°F (16°C) – 54 hours 72°F (22°C) – 36 hours 80°F (27°C) – 24 hours 90°F (32°C) – 18 hours	60°F (16°C) – 48 hours 70°F (21°C) – 24 hours	60°F (16°C) – 48 hours 70°F (21°C) – 36 hours 80°F (27°C) – 24 hours 90°F (32°C) – 12 hours	60°F (16°C) – 54 hours 72°F (22°C) – 36 hours 80°F (27°C) – 24 hours 90°F (32°C) – 18 hours
APPROXIMATE WORKING TIME AT 70°F (21°C)	3 hours	1 hour	2 hours	2.5 hours
CLEAN UP	Water	Water	Water	Water or IMPAX IXT-59 or similar epoxy solvent
PACKAGING PER UNIT	Resin: 1.6 gal. (6.1 L) Hardener: 0.9 gal.(3.4 L) Agg: 4 Bags @ 46 lb. (21 kg)	Resin: 2.4 gal (9.05 L) Hardener: 0.4 gal (1.6 L) Agg: 4 Bags @ 46 lb. (21 kg)	Resin: 2.57 gal (9.7 L) Hardener: 1.1 gal (4.2 L) Agg: 5 Bags @ 53 lb (24 kg)	Resin: 3.5 gal (13.3 L) Hardener: 1.3 gal (4.9 L) Agg: 5 Bags @ 50 lb (22.7 kg)
UNIT WEIGHT	207 lbs. (94 kg)	207 lbs. (94 kg)	305 lbs. (138 kg)	293.6 lb (133.2 kg)
SHELF LIFE	2 yrs. dry storage	2 yrs. dry storage	2 yrs. dry storage	2 yrs. dry storage

* Individual pours may be performed outside of these limits with recommendations by highly experienced installers. Please consult your local representative of the Chockfast Worldwide distributor network or the ITW Technical Services team for an in-depth application review and recommendations.

PHYSICAL PROPERTIES

	CHOCKFAST RED	CHOCKFAST RED SG	ESCOWELD 7505E/7530	CHOCKFAST RED VERSAFLOW
TECHNICAL DATA SHEET	617	618	1612	1042
COMPRESSIVE STRENGTH ASTM C579(B) MOD*	15,250 psi (105 MPa)	18,120 psi (124.9 MPa)	14,000 psi (96.5 MPa)	14,100 psi (97.2 MPa)
COMPRESSIVE MODULUS OF ELASTICITY ASTM C579(B) MOD*	2,000,000 psi (13,793 MPa)	1,970,000 psi (13,582 MPa)	1,800,000 psi (12,411 MPa)	1,600,000 psi (11,000 MPa)
COMPRESSIVE STRENGTH ASTM C579(B) (7-DAY)	13,000 psi (87.1 MPa)	17,500 (120.7 MPa)	12,300 psi (84.8 MPa)	12,300 psi (84.8 MPa)
ADHESION TO CONCRETE ASTM C882	2,350 psi (16.2 MPa) Concrete Failure	3,800 psi (26.2 MPa) Concrete Failure	2,100 psi (14.5 MPa) Concrete Failure	2,050 psi (14.1 MPa) Concrete Failure
LINEAR SHRINKAGE ASTM C531	≤ 0.072%	≤ 0.010%	≤ 0.044%	≤ 0.063%
COEFFICIENT OF LINEAR THERMAL EXPANSION ASTM C531	11.9 X 10 ⁻⁶ in/in/ °F (21.4 X 10 ⁻⁶ cm/cm/ °C)	10.8 X 10 ⁻⁶ in/in/ °F (19.4 X 10 ⁻⁶ cm/cm/ °C)	14.6 x 10 ⁻⁶ in/in/°F (25.2 X 10 ⁻⁶ cm/cm/ °C)	19.1 x 10 ⁻⁶ in/in/°F (34.4 x 10 ⁻⁶ mm/mm/°C)
FLEXURAL STRENGTH ASTM C582	4,025 psi (27.7 MPa)	4,800 psi (33 MPa)	4,700 psi (32.4 MPa)	5,200 psi (35.9 MPa)
FLEXURAL MODULUS OF ELASTICITY ASTM C582	2.00 X 10 ⁶ psi (13,790 MPa)	2.62 X 10 ⁶ psi (18,064 MPa)	1.8 x 10 ⁶ psi (12 410 MPa)	1.55 x 10 ⁶ psi (10,700 MPa)
TENSILE STRENGTH ASTM D638	1,890 psi (13.0 MPa)	2,130 psi (14.7 MPa)	2,100 psi (14.5 MPa)	2,300 psi (15.9 MPa)
FIRE RESISTANCE ASTM D637	Self-Extinguishing	Self-Extinguishing	Self-Extinguishing	Self-Extinguishing
SPECIFIC GRAVITY	2.06	2.205	2.002	2.037

The data shown reflect typical results based on laboratory testing under controlled conditions. Variations from the above data are typical for field-prepared samples.

**Cured 24 hours at room temperature, post-cured 4 hours, and conditioned 4 hours at room temperature before evaluation.*

REFERENCE

For any additional information or recommendations beyond the typical ones listed in this document, please contact your local representative of our Worldwide Distributor Network or ITW Performance Polymers for further support.

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