# webertec 304 VHS (KSA)

# Very high strength shrinkage compensated grout

# PRODUCT

**webertec 304 VHS** is a blend of portland cement, special admixtures and proprietary aggregates designed to provide high flexural and compressive strength performance from plastic to fluid consistencies.

webertec 304 VHS is non-metallic, non-shrink, non-gas forming and contains no chlorides or aluminum powders.

It is a higher performing, multi use, general purpose, precision, construction grout.

# **SCOPE OF USE**

- Assembly of pre-cast parts made of reinforced Or pre-stressed concrete
- Grouting of anchors and dowels
- Jointing
- Keying bridges
- Fixing industrial equipment and heavy machinery mounting plates
- Vertical shoring
- · Void filling operations

# **ADVANTAGES**

- Non-shrinking,
- High strength
- Easy to apply
- Resistant to sea water and sulfates.
- Liquid or plastic consistency



CHARACTERISTICS		
Appearance	Grey powder	
Grain size	0 to 4.75 mm	
Free from chlorides and		
metallic particles		
Fresh density	2340 kg/m³	
(BS 1881:83)		
Lengthchange	0.062 % @ 28 days	
	(ASTM C157-03)	
Pull off stress	> 1.5 N/mm² @ 28 days	
	(BS 1881 Part 207)	

# \*COMPRESSIVE STRENGTH (N/mm²) - BS- EN 12190

AGE	1 day	7 days	28 days	
COMPRESSIVE STRENGTH (N/mm²)	>30	>60	>75	
STANDARD	38	62	76	

# FLEXURAL STRENGTH & TENSILE STRENGTH at 28 Days for fluid consistency

AGE	28 days
FLEXURAL STRENGTH (N/mm²) – BS EN 196-1	>10
TENSILE STRENGTH (N/mm²) – BS 6319:PART 7: 1985	>3

\* The one day results obtained @ 28 °C . The higher the curing temperature, the higher will be the strength @ 24 hours.

The mechanical characteristics will be higher if the weber.tec 304 VHS is mixed at plastic consistency. In this case, the compressive strength can exceed 80 N/mm<sup>2</sup> at 28 days.

\*Properties listed above are obtained with 3.2 liters of water and are only based on controlled laboratory samples and tests: Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions



# **APPLICABLE STANDARDS**

BS EN 196 Part 1 - BS EN 12190 BS 1881 PART 207 ASTM C 157-03 BS 6319 - Part 7 - 1985 BS 1881: 83

#### **INSTRUCTIONS FOR USE** MORTAR PREPARATION

Add the powder to the water and mix for 3 minutes. To ensure a homogeneous and uniform mix, an electric mixer with high rotation speed must be used for fluid and flowable consistencies.

CONSISTENCY	webertec	WATER (1)	VOLUME IN
	304 VHS		PLACE
PLASTIC	50 Kg	5.2 to 5.5 lit.	24 lit
FLOWABLE	50 Kg	6.0 to 6.4 lit.	24 lit
FLUID	50 Kg	6.4 to 6.75lit.	24 lit.

(1) : Half quantity of water is required for 25 kg package

The mortar is obtained by mixing **webertec 304 VHS** with clean water. The amount of water used depends on the workability required.

# FOR GROUTING & CONCRETE REPAIR

**webertec 304 VHS** can be used for thicknesses up to 10 cm. Apply the mortar evenly on the concrete surface where required.

Ideal application temperature is between +  $5^{\circ}$ C and +  $35^{\circ}$ C. If the application temperature is higher than  $35^{\circ}$ C, make sure to use cool water to keep the mixed grout temperature below 30 °C.

# **CURING**

Protect the work against rapid drying from wind, sun and excessive heat by using a curing compound like **weberad cure WH** or **weberad cure Y 40** or by covering with properly secured plastic sheeting.

# STORAGE

12 months after manufacturing date in original and non-open packaging , under cover, in dry condition, away from humidity, protected from extreme temperatures and direct sunlight.

# PRECAUTIONS

Substrate must be sound and resistant. It should be saturated with water a few hours prior to installation. Remove all water used in wetting support prior to installation of **webertec 304 VHS.** 

Do not mix with other hydraulic binders.

# **SAFETY PRECAUTIONS**

The product contains cement powders which, when mixed with water, release alkalis that could be harmful to the skin. It is preferable that the application be done in a ventilated area, and to wear protective gear for hands, eyes and respiratory system and to avoid breathing of the dust. Splashes on the skin should be washed away by cleaning with soap and water. In case of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting, in both cases seek medical attention. The product is non-flammable.

# DISCLAIMER

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