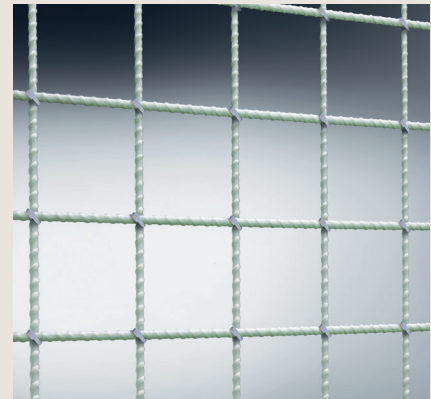


# Ancamine® R 215

## New solution for composite rebars

Ancamine® R 215 is a new solution for composite reinforced bars that combines the advantages of polyamines in epoxy systems



### Innovative epoxy technology for composite rebars

Evonik has developed a new amine hardener for hot cured epoxy composite bars. Compared to common solutions composite rebars based on Ancamine® R215 exhibit an

outstanding performance profile with regard to both mechanical and chemical properties leading to low lifetime costs.

#### Rebar properties

\* values taken from literature (ACI 440.1R-06)

	Ancamine® R 215	Standard GFRP*	Steel*	Unit	Test Method
Tensile strength	1250	483-1600	483-690	MPa	DIN EN 2561
Tensile modulus	60	35-51	200	GPa	
Tensile strength after alkali	93 / (1175)	75 / (361-1200)	-	% / (MPa)	DIN EN 2561 / Alkali test acc. ACI-440.3R-04 (Ca(OH) <sub>2</sub> , NaOH, KOH solution pH 12.6-13)
Tensile modulus after alkali	95 / (57)	-	-	% / (GPa)	
HDT	140	65-120	-	°C	acc. ISO 75 (Curing: 1h/50°C + 1h/150°C)
Density	2,1	2,1	7,85	g/cm <sup>3</sup>	OECD 109

### Benefits at a glance

#### Processing

- Easy handling/Low viscosity
- High reactivity
- High speed process
- Low energy costs

#### Application properties

- Excellent alkali and chemical resistance
- High temperature resistance
- No corrosion
- High tensile strength
- Very low magnetic and thermal conductivity

### Applications

- Concrete exposed to de-icing salts
- Concrete exposed to marine salts
- Tunneling and mining applications
- Electromagnetic applications
- Masonry strengthening
- Housebuilding

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