

# We Create.

Product characteristics GRC grade 10/GRC grade 18



**mbX**<sup>®</sup>  
by Concrete Valley



# mbX<sup>®</sup>

High-end facade builders

**Transparency is in our culture**

Frontrunner for a green building process

**The most efficient production process**

Maximum form freedom

**Collaboration brings best solutions**

We like to push boundaries

**Long-term & sustainable partner**



# GRC GRADE 10 & GRC GRADE 18 PRODUCT CHARACTERISTICS

PRODUCT CHARACTERISTICS	GRC GRADE 10	GRC GRADE 18
Thickness	20–40mm	15–30mm
Product tolerances	+/- 3 mm	+/- 3 mm
Life span	Min. 100 years	Min. 100 years
Durability (MKI)	A1–A3: € 1,86/m <sup>2</sup>	A1–A3: € 1,78/m <sup>2</sup>
Sustainable production process	CSC Gold (certificate)	CSC Gold (certificate)
Weight per m <sup>2</sup> facade	47–94 kg/m <sup>2</sup>	29–58 kg/m <sup>2</sup>
Cement/mix ratio relative to mix	25%	50%
Compressive strength/concrete class	[NEN–EN 206] 105 N/mm <sup>2</sup>	[NEN–EN 206] 75 N/mm <sup>2</sup>
Bulk density	+/- 2350 kg/m <sup>3</sup>	+/- 1900 kg/m <sup>3</sup>
Concrete class	Minimum C 60/75	Minimum C 40/50
Minimum compressive strength	Minimum 75 N/mm <sup>2</sup>	Minimum 50 N/mm <sup>2</sup>
Flexural/bending strength MOR	12–18 N/mm <sup>2</sup>	18–30 N/mm <sup>2</sup>
Bending strength LOP	8 N/mm <sup>2</sup>	5–10 N/mm <sup>2</sup>
Water–cement ratio	0,29	0,30–0,38
Water absorptium	< 1 mm	8%–13%
Fibre content	2,0% excl. mesh.	4,5–5%
Weigth m <sup>3</sup> material kg/m <sup>3</sup>	2375	1800
Fire rating	Class A1	Class A1 (A2 met polymer)
Impact loads	Bomb–blast proof	Bomb–blast proof
Dimensions	4000 x 2000	4000 x 2000
E–modules	25.000 – 30.000 N/mm <sup>2</sup>	15.000 – 20.000 N/mm <sup>2</sup>

# GRC GRADE 10 & GRC GRADE 18 PRODUCT CHARACTERISTICS

PRODUCT CHARACTERISTICS	GRC GRADE 10	GRC GRADE 18
Optional treatments	Sandblasting Smooth Polishing	Sandblasting Smooth Polishing



## EUROCODES & STANDARDS

Product:

- GRC Grade 10
- ISO 9001

Eurocodes:

- BS-EN 15191:2009
- BS-EN 1992-1-1
- NEN-EN-1990
- NEN-EN-1991
- NEN-EN-1992
- NEN-EN-1993
- NEN-EN-1994
- NEN-EN-1995
- NEN-EN-1996
- NEN-EN-1997
- NEN-EN-1999

GRCA specifications:

- GRADE 10
- Practical design guide
- Method of testings

Product:

- GRC Grade 18
- ISO 9001

Eurocodes:

- BS-EN 15191:2009
- BS-EN 1992-1-1
- NEN-EN-1990
- NEN-EN-1991
- NEN-EN-1992
- NEN-EN-1993
- NEN-EN-1994
- NEN-EN-1995
- NEN-EN-1996
- NEN-EN-1997
- NEN-EN-1999

GRCA specifications:

- GRADE 18
- Practical design guide
- Method of testings

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## mbX projects

View a selection of our most iconic and also current facade projects such as **KJ Plein in Den Haag**, **DPG media in Amsterdam** and **Station Landsingerland–Zoetermeer**.



## Architectural facade project?

Want to learn more about our facades and applications or **request a sample**? Contact us!

**mbX**<sup>®</sup>  
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