

## CHECKMATE RIGIDGRID™ PP UX

Checkmate RigidGrid UX series is specifically designed for improved performance in soil reinforcement applications where strength develops uni-axially. UX RigidGrids are engineered to be mechanically and chemically stable in aggressive soil environments and are not attacked by aqueous solutions of salts, acids, alkalis and are not susceptible to hydrolysis, environmental stress cracking and micro-organisms attack. These geogrids also contain a minimum of 2% finely divided carbon black and are formulated to resist ultraviolet light degradation.

TENSILE PROPERTIES	TEST METHOD	UNIT	UX50PP	UX80PP	UX100PP
Ultimate Strength <sup>(1)</sup>	ASTM D 6637	kN/m	50.1	80.2	106.6
Tension at 5% Strain <sup>(1)</sup>	ASTM D 6637	kN/m	40.1	63.3	82.8
Strain at Ultimate <sup>(1)</sup>	ASTM D 6637	%	6.9	7.2	7.7
DESIGN PROPERTIES					
Reduction Factor for Durability- RFid			1.0	1.0	1.0
Reduction Factor for Installation Damage – RFid (backfill max size 20mm- D50 about 0.7mm )			1.10	1.10	1.10
Reduction Factor for Creep ( 10% strain limit ) RFcr			4.0	4.0	4.0
Long Term Design Strength – LTDS NCMA method			11.38	18.22	24.22
PHYSICAL PROPERTIES					
Roll Length <sup>(2)</sup>	Minimum	m	50m		
Roll Width <sup>(2)</sup>	Minimum	m	1.1m		

**NOTE:** 1) Average Values, (2) Typical. Standard roll lengths are shown. The products may be fabricated to custom lengths to meet customer needs.

### CHECKMATE RIGIDGRID UX PP Typical Applications:

- Road sub-base Reinforcement
- Soil Stabilization
- Improvement of Access Roads to Oil Platforms
- Railway Ballast Reinforcement over soft foundations
- Parking lot Stabilization
- Temporary Military Road Improvement
- Secondary Slope and Wall Reinforcement

**Disclaimer:** Checkmate reserves the right to change these specifications without notice and at its sole discretion. The user of this specification sheet is required to obtain formal confirmation from Checkmate of the current specification of the product it intends to use.



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## CHECKMATE RIGIDGRID™ HDPE UX

Checkmate RigidGrid UX series is specifically designed for improved performance in soil reinforcement applications where strength develops uni-axially. UX RigidGrids are engineered to be mechanically and chemically stable in aggressive soil environments and are not attacked by aqueous solutions of salts, acids, alkalis and are not susceptible to hydrolysis, environmental stress cracking and micro-organisms attack. These geogrids also contain a minimum of 2% finely divided carbon black and are formulated to resist ultraviolet light degradation.

TENSILE PROPERTIES	TEST METHOD	UNIT	UX35HD	UX50HD	UX80HD	UX120HD	UX135HD	UX150HD	UX160HD
Ultimate Strength <sup>(1)</sup>	ASTM D 6637	kN/m	35.0	50.0	96.4	122.9	135.0	150.0	160.0
Tension at 5% Strain <sup>(1)</sup>	ASTM D 6637	kN/m	18.0	25.0	56.9	69.6	74.0	83.0	93.0
Strain at Ultimate <sup>(1)</sup>	ASTM D 6637	%	12.0	12.0	12.3	11.7			
<b>DESIGN PROPERTIES</b>									
Reduction Factor for Durability- RFid			1.0	1.0	1.0	1.0	1.0	1.0	1.0
Reduction Factor for Installation Damage – RFid (backfill max size 20mm- D50 about 0.7mm )			1.10	1.10	1.10	1.10	1.10	1.10	1.10
Reduction Factor for Creep ( 10% strain limit ) RFcr			2.5	2.5	2.5	2.5	2.5	2.5	2.5
Long Term Design Strength – LTDS NCMA method			12.72	18.18	35.05	44.69	49.09	54.45	58.18
<b>PHYSICAL PROPERTIES</b>									
Roll Length <sup>(2)</sup>	Minimum	m	50						
Roll Width <sup>(2)</sup>	Minimum	m	1.1						

**NOTE:** 1) Average Values, (2) Typical. Standard roll lengths are shown. The products may be fabricated to custom lengths to meet customer needs.

### CHECKMATE RIGIDGRID UX HDPE Typical Applications:

- Road sub-base Reinforcement
- Soil Stabilization
- Improvement of Access Roads to Oil Platforms
- Railway Ballast Reinforcement over soft foundations
- Parking lot Stabilization
- Temporary Military Road Improvement
- Secondary Slope and Wall Reinforcement

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