

# Technical specification sheet

## Concertainer<sup>®</sup> units



A geotextile-lined unit for general use as an earth-filled gabion. The units are suitable for filling with earth, sand, gravel, crushed rock and other granular materials. The units are suitable for a wide range of uses, including the construction of walls and barriers, flood protection, erosion protection, protection against accidental explosions and homeland security applications.

### General specifications

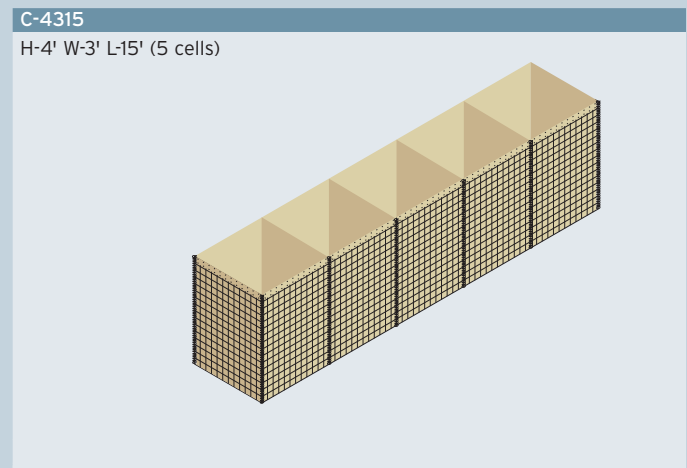
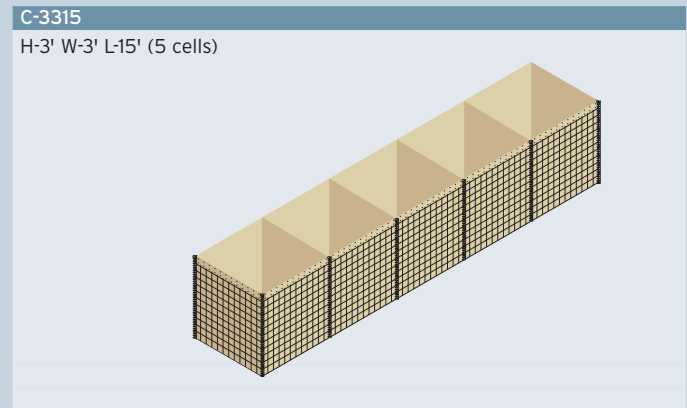
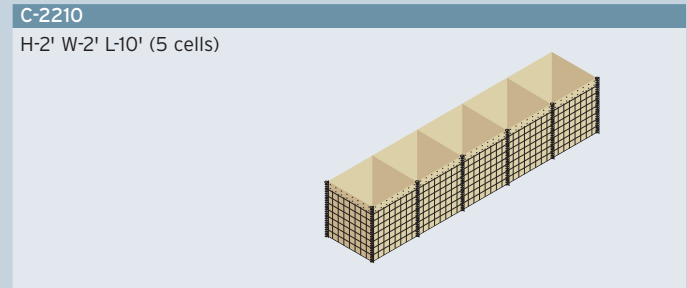
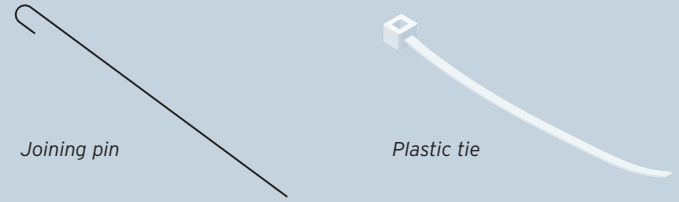
Geotextile-lined welded wire fabric gabion to ASTM A 974-97. The geotextile is a heavy-duty, non-woven, permeable, polypropylene fabric, available in either green or sand color.

Welded wire mesh	
<b>Wire</b>	
Wire gauge	8.5 American SWG, steel
Wire diameter <sup>1</sup>	0.155"/3.937mm
Tensile strength of wire	80 - 110 ksi 550 - 760 kPa
Corrosion Protection	Zn-5Al-MM to ASTM A 856A/A 856M-03 minimum coating weight 0.8oz/ft <sup>2</sup> / 240g/m <sup>2</sup>
<b>Mesh</b>	
Wire spacing	3" x 3"
Tolerance on line wire spacing	+/- 1/8"
Cross wire straightness across test panel	limit of deviation 1/4" in 72"
Mesh strength	70% of wire tensile strength
<b>Panels</b>	
Squareness	in 4' diagonals shall not vary by more than 5/8"
Flatness	in 6' not more than 2" from plane

<sup>1</sup>Wire diameter is nominal

Geotextile	Standard	Value
<b>Mechanical Properties</b>		
Grab Tensile Strength (Machine Direction)	ASTM D 4632	130lbs
Grab Tensile Strength (Cross Direction)	ASTM D 4632	160lbs
Grab Elongation (Machine Direction)	ASTM D 4632	50%
Grab Elongation (Cross Direction)	ASTM D 4632	55%
CBR Burst	ASTM D 6241	450lbs
Cone Drop Test	EN 918	24mm
<b>Endurance Resistance</b>		
UV Resistance (% retained after 500hrs)	ASTM D 4355	70%
Chemical Resistance	EN 14030	80%
Oxidation Resistance	EN 13438	80%
<b>Hydraulic Properties</b>		
Apparent Opening Size	ASTM D 4751	70 US Std. Sieve
Permittivity	ASTM D 4491	1.30sec <sup>-1</sup>
Permeability	ASTM D 4491	0.24 cm/sec
Water Flow Rate	ASTM D 4491	100 gpm/ft <sup>2</sup>

Joining pins are supplied to join units together. Plastic ties are supplied to close the geotextile together at the top of unit ends. This prevents fill material from falling between unit joints.



The values given are indicative and correspond to average results obtained in our suppliers' laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

EP/TSS/103/1.1/MAR09

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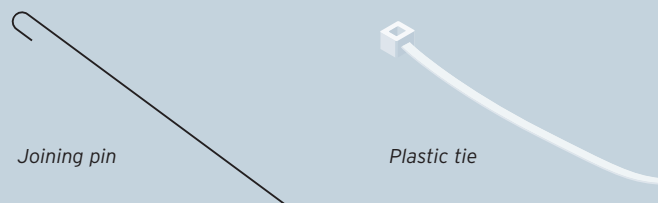
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A geotextile-lined unit for use in flood-protection applications. The design of these units reduces permeability of the wall, when filled. Floodline units are designed for easy removal. Suitable for filling with earth, sand or well-graded gravel. Floodline units may also be used in other applications.

**General specifications**

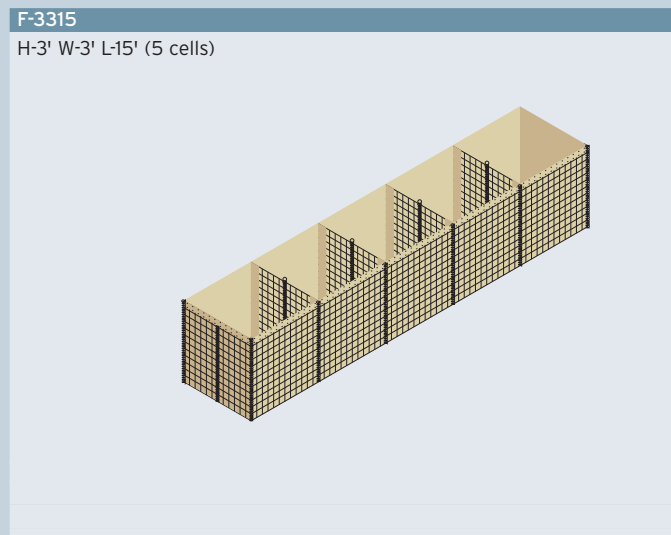
Geotextile-lined welded wire fabric gabion to ASTM A 974-97. The geotextile is a heavy-duty, non-woven, permeable, polypropylene fabric, available in either green or sand color.

Joining pins are supplied to join units together. Plastic ties are supplied to close the geotextile together at the top of unit ends. This prevents fill material from falling between unit joints.

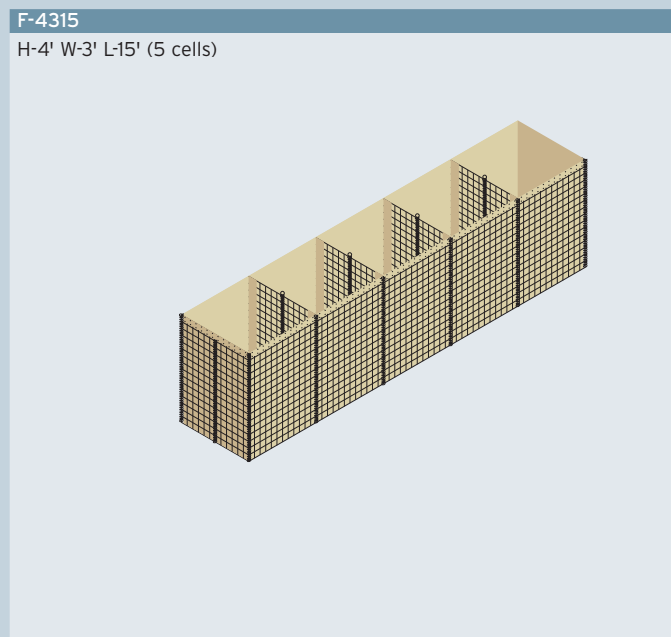


Welded wire mesh	
<b>Wire</b>	
Wire gauge	8.5 American SWG, steel
Wire diameter <sup>1</sup>	0.155"/3.937mm
Tensile strength of wire	80 - 110 ksi 550 - 760 kPa
Corrosion Protection	Zn-5Al-MM to ASTM A 856A/A 856M-03 minimum coating weight 0.8oz/ft <sup>2</sup> / 240g/m <sup>2</sup>
<b>Mesh</b>	
Wire spacing	3" x 3"
Tolerance on line wire spacing	+/- 1/8"
Cross wire straightness across test panel	limit of deviation 1/4" in 72"
Mesh strength	70% of wire tensile strength
<b>Panels</b>	
Squareness	in 4' diagonals shall not vary by more than 5/8"
Flatness	in 6' not more than 2" from plane

<sup>1</sup>Wire diameter is nominal



Geotextile	Standard	Value
<b>Mechanical Properties</b>		
Grab Tensile Strength (Machine Direction)	ASTM D 4632	130lbs
Grab Tensile Strength (Cross Direction)	ASTM D 4632	160lbs
Grab Elongation (Machine Direction)	ASTM D 4632	50%
Grab Elongation (Cross Direction)	ASTM D 4632	55%
CBR Burst	ASTM D 6241	450lbs
Cone Drop Test	EN 918	24mm
<b>Endurance Resistance</b>		
UV Resistance (% retained after 500hrs)	ASTM D 4355	70%
Chemical Resistance	EN 14030	80%
Oxidation Resistance	EN 13438	80%
<b>Hydraulic Properties</b>		
Apparent Opening Size	ASTM D 4751	70 US Std. Sieve
Permittivity	ASTM D 4491	1.30sec <sup>-1</sup>
Permeability	ASTM D 4491	0.24 cm/sec
Water Flow Rate	ASTM D 4491	100 gpm/ft <sup>2</sup>



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# Technical specification sheet

## Rockface™ unit - RF-3315



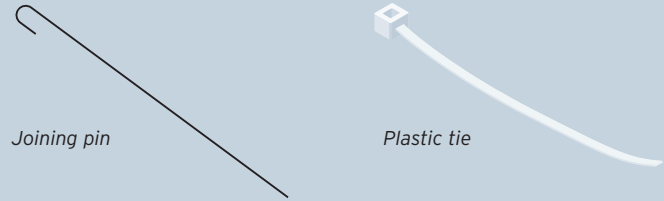
A geotextile-lined unit with 1' wide unlined front section. The geotextile-lined rear section allows the use of more economical fill such as earth, sand or gravel.

### General specifications

Geotextile-lined welded wire fabric gabion with unlined front section to ASTM A 974-97. The geotextile is a heavy-duty, non-woven, permeable, polypropylene fabric, available in either green or sand color.

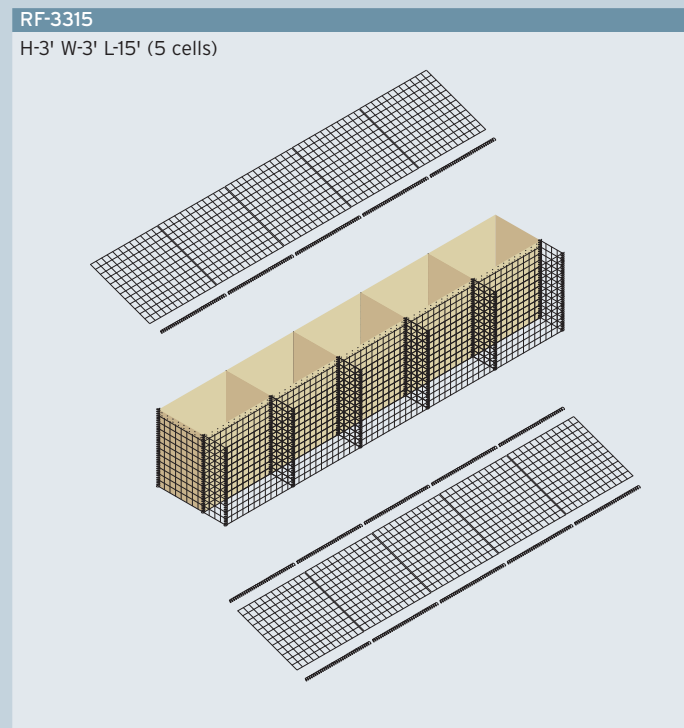
Lids and bases are supplied with all Rockface units. Lids and bases are pre-fitted to the units at the factory. Lacing wire and coils are supplied to close lids and bases on site.

Joining pins are supplied to join units together. Plastic ties are supplied to close the geotextile together at the top of unit ends. This prevents fill material from falling between unit joints.



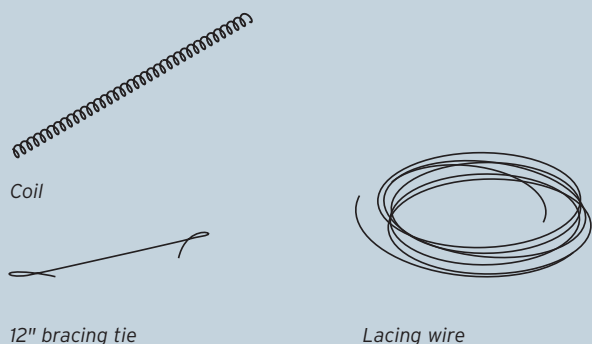
Welded wire mesh	
<b>Wire</b>	
Wire gauge	8.5 American SWG, steel
Wire diameter <sup>1</sup>	0.155"/3.937mm
Tensile strength of wire	80 - 110 ksi 550 - 760 kPa
Corrosion Protection	Zn-5Al-MM to ASTM A 856A/A 856M-03 minimum coating weight 0.8oz/ft <sup>2</sup> / 240g/m <sup>2</sup>
<b>Mesh</b>	
Wire spacing	3" x 3"
Tolerance on line wire spacing	+/- 1/8"
Cross wire straightness across test panel	limit of deviation 1/4" in 72"
Mesh strength	70% of wire tensile strength
<b>Panels</b>	
Squareness	in 4' diagonals shall not vary by more than 5/8"
Flatness	in 6' not more than 2" from plane

<sup>1</sup> Wire diameter is nominal



Geotextile	Standard	Value
<b>Mechanical Properties</b>		
Grab Tensile Strength (Machine Direction)	ASTM D 4632	130lbs
Grab Tensile Strength (Cross Direction)	ASTM D 4632	160lbs
Grab Elongation (Machine Direction)	ASTM D 4632	50%
Grab Elongation (Cross Direction)	ASTM D 4632	55%
CBR Burst	ASTM D 6241	450lbs
Cone Drop Test	EN 918	24mm
<b>Endurance Resistance</b>		
UV Resistance (% retained after 500hrs)	ASTM D 4355	70%
Chemical Resistance	EN 14030	80%
Oxidation Resistance	EN 13438	80%
<b>Hydraulic Properties</b>		
Apparent Opening Size	ASTM D 4751	70 US Std. Sieve
Permittivity	ASTM D 4491	1.30sec <sup>-1</sup>
Permeability	ASTM D 4491	0.24 cm/sec
Water Flow Rate	ASTM D 4491	100 gpm/ft <sup>2</sup>

Coils are supplied to close all bases. 12" bracing ties are supplied for the rock fill insert. Lacing wire is supplied to close all lids and to join courses on site.



The values given are indicative and correspond to average results obtained in our suppliers' laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

EP/TSS/103/1.1/MAR09

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Unlined Concertainer unit for general use as a welded wire fabric gabion.

**General specifications**

Welded wire fabric gabion to ASTM A 974-97.

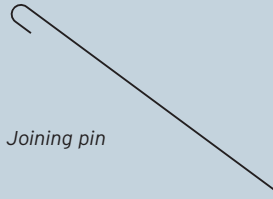
Lids and bases are supplied with all Rockbox units. Lids and bases are pre-fitted to the units at the factory. Coils are supplied to close lids and bases on site.

Welded wire mesh	
<b>Wire</b>	
Wire gauge	8.5 American SWG, steel
Wire diameter <sup>1</sup>	0.155"/3.937mm
Tensile strength of wire	80 - 110 ksi 550 - 760 kPa
Corrosion Protection	Zn-5Al-MM to ASTM A 856A/A 856M-03 minimum coating weight 0.8oz/ft <sup>2</sup> / 240g/m <sup>2</sup>
<b>Mesh</b>	
Wire spacing	3" x 3"
Tolerance on line wire spacing	+/- 1/8"
Cross wire straightness across test panel	limit of deviation 1/4" in 72"
Mesh strength	70% of wire tensile strength
<b>Panels</b>	
Squareness	in 4' diagonals shall not vary by more than 5/8"
Flatness	in 6' not more than 2" from plane

<sup>1</sup>Wire diameter is nominal

2' high units	
RB-2210 H-2' W-2' L-10' (5 cells)	
RB-224 H-2' W-2' L-4' (2 cell)	RB-226 H-2' W-2' L-6' (3 cell)
RB-228 H-2' W-2' L-8' (4 cell)	

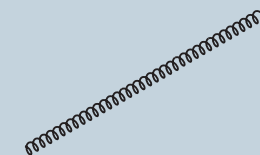
Joining pins are supplied to join units together.



Joining pin

3' high units	
RB-3315 H-3' W-3' L-15' (5 cells)	
RB-336 H-3' W-3' L-6' (2 cell)	RB-339 H-3' W-3' L-9' (3 cell)
RB-3312 H-3' W-3' L-12' (4 cell)	

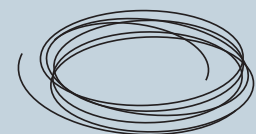
Coils are supplied to close all lids and bases. 17 1/2" bracing ties are supplied. Lacing wire is supplied to join courses on site.



Coil



17 1/2" bracing tie



Lacing wire

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