RocBloc 2K™

Debris Containment Net
System Specifications / Installation

1. RocBloc 2K™ System Overview

The RocBloc 2K debris nets are used for light debris containment and for use as a protective barrier suitable for vertical or horizontal installation. While primarily designed to contain construction debris, tools and material, RocBloc 2K may also be used as a material tie down cover, shade cover, and open pit cover. Additional applications include window/access protection, open wall guards and mid-rail fencing – protecting work areas, people, property and adjacent public ways.

The hardware described in Section 3 through 6 is not supplied with individual RocBloc panels, but must be ordered separately or as part of a system.

RocBloc 2K combines two distinct types of synthetic netting in a stacked configuration for high strength debris and material containment. The web bordered panel consists of a load bearing structural net with a small particle debris liner. Grommets are installed along all sides. Structural materials are HTPP and stainless steel.

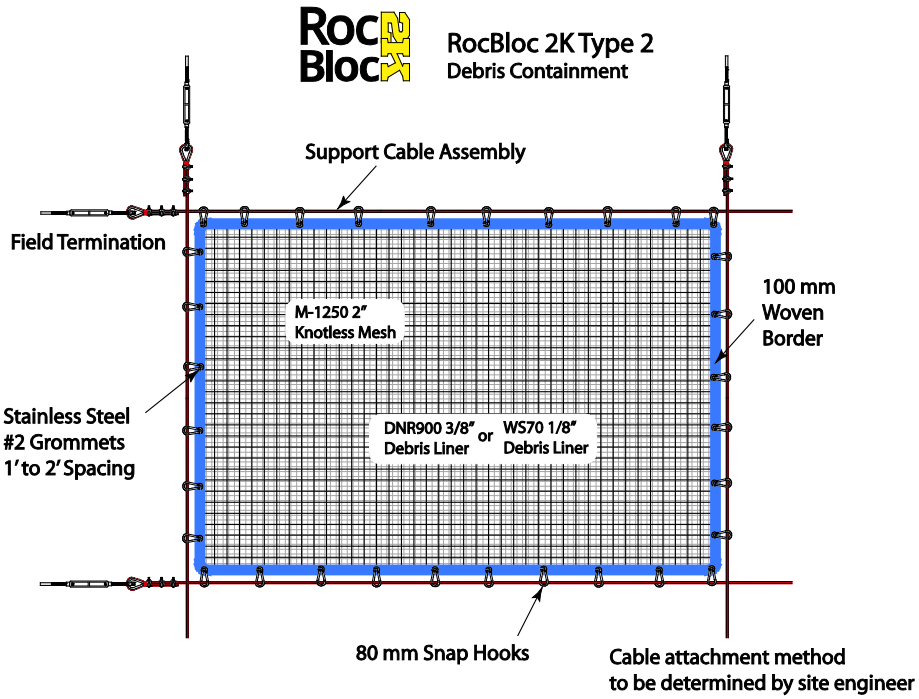
RocBloc 2K may be suspended or attached to concrete or stone as a skin, tight to the surface and fastened directly with bolt anchors.

Any debris, construction material or tools that may fall is contained within the two-ply netting panel. Individual hooked panels may be cleaned of debris or replaced without disturbing the entire system.

System installation must comply with local codes, and the debris containment system function must comply with applicable safety standards for overall system performance.

Components supplied by others for use within the system must comply with the overall system performance for strength as stated in the manufacturer's specifications.

Note: RocBloc debris containment systems are designed for debris only and are not intended for personnel fall protection.



2. RocBloc 2K™ Net Panel

RocBloc 2K net panels are fabricated using a two-ply construction method to join a 2" structural net underlay to a 3/8" or 1/8"debris net liner. The two net panels are sandwiched and joined together at the border with 3"woven High Tenacity Polypropylene webbing and then double-stitched with UV treated and lubricated #138 polyester sewing thread. #2 stainless steel grommets are installed two foot on-center along all sides of the finished panel.

The structural underlay used in RocBloc is InCord M-1250 HTPP knotless netting. Knots are eliminated using a balanced knitted construction with filaments running continuously throughout the netting for strength and durability. HTPP fiber is, highly resistant to abrasion, light weight, and resistant to moisture and chemicals and has enhanced UV resistance.

The standard debris liner is InCord DNR900 3/8" knotless netting. The polyester woven fiber is highly resistant to abrasion, light weight, and is resistant to fabric tears. DNR900 is used in construction for large debris containment. It is the strongest, most durable debris liner offered. Its larger openings allow for better wind flow.

The optional debris liner is InCord WS70 1/8" knit polyethylene mesh. The Knit High Density Polypropylene monofilament fiber is light weight, and is resistant to fabric tears. WS70 is recommended for small particle containment.

3. Installation – General

The nets shall be installed as close to the work area as practical. For an installation at any distance below the work area, the maximum impact from falling debris must be calculated as a dynamic load. The maximum calculated impact must not exceed the net rating.

For bridge use, the net panels shall be hung with sufficient ground clearance to prevent contact with any surface below the safety net during full impact load, which is typically twice the shortest dimension of the net.

Mounting anchors for suspension cables must be secured to a suitable working surface approved in conjunction with the installer and construction engineers and subject to inspection by the site engineer. Anchoring hardware is 1/2 inch and cabling is 3/8 inch.

4. Anchor Installation

Install cable anchors according to the layout sheets supplied with the system. A typical system will use 1/2”x 6” Dropped Forge Eye Bolts, drilled and anchored into the concrete with epoxy adhesive.

Drilling Caution: Avoid contact with rebar and pre-stressed concrete cabling.

Anchor placement is typically at the four outer corners covering the work area with intermediate anchors placed every 20 feet along the sides of the bridge. A 20’ x 20’ grid is optimal but this spacing can vary depending on the local dimensions of bridge geometry.

Hanger-Cables should be used to support wire grid at intersecting points or at distances of greater than 30 to 40 feet depending on site requirements. An installed cable system should not sag more than two feet between two support points.

5. Cable Installation

Install 1/2” turnbuckles at one end of each cable run. Longer runs may require two turnbuckles chained together eye to jaw end.

Install the 3/8” suspension cable through the anchors of each cable run. Pull hand taught, and then secure each cable end with a thimble and three wire rope clips. Trim excess cable.

Use vertical hanger-cables at grid intersections to support long horizontal cable runs.

Tension the support cables by adjusting the turnbuckles for minimal sag in each cable. Do not over-tighten as the strength of the cable will be reduced.

6. Netting Installation

Install the net panels according to the layout sheets supplied with the system as designed by the manufacturer, installer or construction engineer. Be sure that the net panels are placed properly, and height and length are oriented correctly.

The net panel is attached to the suspension cable at each grommet hole using 80 mm snap hooks (spacing 12" to 24" dependent on panel configuration). Attach the 4 corners of each net first then go back and fill in with the remaining hooks.

Note: The debris liner must be installed face up toward the bridge/hazard with the large mesh support net on the bottom.

7. System Inspection and Maintenance

Debris nets and hardware must be inspected by a competent person[1] after installation and not less than once each month thereafter. Additional inspections must be made after alterations, repair or following any significant impact loading. Inspection must include all netting, cables, snap hooks and anchors. Debris should be removed as it if found.

If any welding or cutting operations occur above the safety net, weld protection must be provided for that area, and more frequent inspections should be conducted in proportion to the level of dangers involved.

Nets or hardware that show deterioration from mildew, wear, tears or stress, that may affect their strength, must be immediately removed from service for further inspection, repair or disposal.

It is recommended that an up-to-date, on the job record be maintained for each debris net system. The record should include inspection dates and notes for each system installation, removal, repairs and component replacements.

1 "...capable of identifying existing and predictable hazards in the surroundings or working conditions that are hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them". ANSI® A10.11-1989

8. Debris Removal

During system inspections or as debris is found, it should be removed to reduce loading on the system. Gaining access inside the net is to unhook only the sides necessary for removal of the debris.

Replace or repair any damaged net panels following debris removal.

9. System Removal

Remove the net panels from all suspension cables, and then release cables. If anchors are removed, fill all holes with suitable sealant. Do not reuse cables or anchors.

Note: If delivered as a system the following hardware components may be supplied:

10. Component Specifications – Hardware as recommended by InCord

1/2" x 6" Eye Bolt Anchor

Construction.....Drop Forge Hot Galvanized Steel
Working Load.....2200 lb (1000 kg)
Net Weight.....63.0 lb/100 pieces (28.6 kg/100 pieces)
Specifications.....ASME B30.26

3/8" Galvanized Steel Cable

Construction.....7x19 Galvanized Steel Wire
Working Load.....7000 lb (3180 kg)
Net Weight.....24.3 lb/100 ft (36.2 kg/100 m)
Specification .....Federal Specification RR-W-410E

1/2" Turnbuckle, Jaw/Eye

Construction.....Dropped Forge Carbon Steel, Hot Galvanized Finish
Working Load.....2200 lb (1000 kg)
Net Weight.....1.68 lb (0.76 kg)
Specification .....FF-T791b, Type 1, Form 1 - Class 8, and ASTM F-1145

3/8" Malleable Wire Rope Clip (3 per assembly)

Construction.....Malleable Iron Saddle, Steel U-Bolt, Zinc Plate
Net Weight.....21.0 lb/100 pieces (9.5 kg/100 pieces)
Specification……FF-C-450 TYPE 1 CLASS 1

3/8" Wire Rope Thimble

Construction.....Zinc Plated Rolled Steel
Net Weight.....6.2 lb/100 pieces (2.8 kg/100 pieces)

Snap Hook, 80 mm

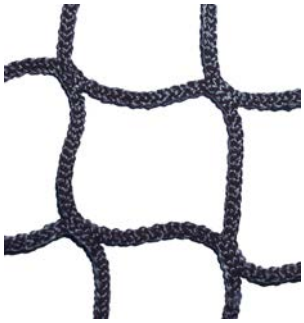
Construction.....Zinc Plated Steel
Working Load.....500 lb (230 kg)
Net Weight.....3.18 lb/100 pieces (7.0 kg/100 pieces)

Concrete Adhesive Anchoring Kit

Type .....Two component epoxy
Strength.....ASTM D695: 10,300 psi minimum

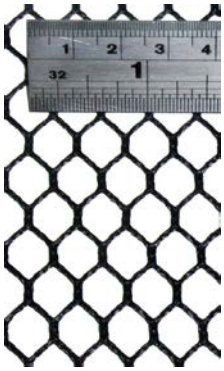
11. Component Specifications – Netting as supplied by InCord

M-1250 Raschel Knotless Netting (structural layer)



Fiber .....High Tenacity Polypropylene (HTPP)
Cord Diameter.....1/8 inch (3 mm)
Mesh Size.....2 inch (50 mm) square opening
Mesh Break .....280 lbf (1.25 kN)
Weight.....0.0303 lb/ft^2 (148 g/m^2)
Melting Point .....320°F (160°C)
UV.....Extra UV Stabilizers added
Color .....Black, Gray or Sand

DNR900 Debris Netting



Fiber .....Knit Polyester
Mesh Size.....3/8 inch (9 mm) square opening
Burst Strength. .....170 psi (ASTM 5120)
Color .....Black, Gray or Sand

WS70 Debris Netting

Fiber .....Polyethylene
Mesh Size.....1/8 inch (3 mm) square opening
Air Permeability.....Exceeds 1470 CFM / sq ft^2
Burst Strength. .....177.74 lbf (ASTM D 3886)
Color.....Black