Tensioned Cable Estimate Worksheet

The following estimating standards will help you find the proper quantities of cable and cabling hardware needed when installing Nixalite® bird netting with a tensioned perimeter and support cable system. Before using this worksheet you must have accurate dimensions of the areas to be protected with bird netting. For planning steps, see the Planning A Bird Net Installation brochure from Nixalite®.

Net Cable:
250 foot spool = 225' of installation.
500 foot spool = 450' of installation
NOTE: Coverage is always less than spool capacity due to extra cable used for cable connections.
NOTE: include any support cable footage in your totals. Nixalite does not break spools or cut cable to length.
Maximum continuous cable length:
25 feet with small turnbuckles.
50 feet with medium & large turnbuckles.

Connection Hardware:
Hardware used to fasten the cable to corner hardware (large eye bolts or screw eyes) and turnbuckles.

Hardware needed for each connection:
Ferrules: 2 each. For cable runs UP TO 25 feet long.
Wire Rope Clamps: 2 each. REQUIRED for cable runs of 25' to 50'. Optional for cable runs less than 25'.
Nixalite recommends clamps for all connections.

Thimbles: 1 per connection. REQUIRED for wire rope clamp connections. Recommended for ferrule connections.

Turnbuckles:
There is ALWAYS one turnbuckle per run of cable. NEVER go around a corner or curve without adding a turnbuckle to the estimate.

Note: Add 1 Turnbuckle for every support cable.

Maximum Distance Between Turnbuckles:
Small Turnbuckles: 25 feet.
Medium & Large Turnbuckles: 50 feet.

Corner Hardware:
Maximum Spacing: 50 feet.
NEVER go around a corner or curve without adding additional corner hardware. Match the installation surface to the proper hardware.

Side Note: Add 2 corner hardware sets for every support cable.

Wood: Large screw eyes.
Masonry: Large eye bolts with screw anchors.
Sheet Metal: Large screw eyes (NOTE 1).
Steel & Iron: Large eye bolts with hex nuts.

Cable Guide Hardware:
Used to guide the cable between the corner hardware. Choose guide hardware that best suits the application.

Maximum Spacing: 2 feet.
Wood: EZClip, small screw eyes, and sidewinders.
Masonry: EZClip, cotter pin/anchor, small eyebolts with screw anchors, and sidewinders.
Sheet Metal: EZClip, small screw eyes1, and sidewinders (see note 1).
Steel & Iron: EZClip, small eye bolts with hex nuts, sidewinders, flange clips.

Net Rings:
2,500 count boxes. We do not break boxes. Do not use Net Rings directly on PollyNet. Use Poly Clips - see Poly Hardware Installation Sheet (from Nixalite).

Recommended Net Ring Usage:
Use one Net Ring for each netting mesh.
Cable attachment: 1 ring / mesh.
Seams: 1 ring / mesh (on both sides of seam).
Zippers: 1 ring / mesh (on both sides of zipper).

Note 1: Usage depends on thickness of sheet metal. Thick sheet metal may require an eyebolt with nut.

See the back of this page for Cable Installation Guidelines and Examples
General Procedures

1. Install Corner Hardware.
   Drill 9/32” dia. hole for corner hardware eyebolt. Secure with the supplied hex nut.

2. Install Cable Guide Hardware.
   Install cable guides 24” o.c. Use Sammy Socket to seat the example sidewinder cable guides properly. Align cable guide holes for cable.

3. Fasten Cable to Eyebolts.
   Each connection - 2 rope clamps, 1 thimble. Slide 2 rope clamps onto cable first.
   Push a thimble into the eyebolt. Make a loop by passing the cable through the eyebolt. Make sure there is at least 3” of extra cable.
   Position the first rope clamp 2” from eyebolt and lightly tighten the nuts. Position the second rope clamp as close to the eyebolt as possible and lightly tighten nuts. Take up slack in cable and tighten all rope clamp nuts.

4. Fasten Cable to Turnbuckles.
   Run the cable through all cable guides before fastening the cable to the turnbuckle.
   Open the turnbuckle to its maximum safe length. Push a thimble into the eyelet of the turnbuckle. Slide 2 rope clamps over the end of the cable. Make a loop by passing cable through turnbuckle eye. Make sure there is at least 3” of extra cable. Position the first rope clamp 2” from eyelet and lightly tighten the nuts. Position second rope clamp as close to the eyelet as possible. Lightly tighten nuts.
   Adjust the length of the cable so the hook end of the turnbuckle will go through the corner eyebolt then tighten all rope clamp nuts.

5. Apply load and Re-tighten all clamps!
   After the netting has been attached to cable with net rings, the installation is tensioned by tightening the turnbuckles. In tension, multi-strand cables will stretch in length and shrink in diameter (small amounts). This can lead to loose rope clamps. Be sure to re-tighten all rope clamp nuts.

Example Area (10’ x 10’)

Basic Cable Connections

Stainless steel cable
3/32” dia. 7x7-49 strand

TIP: With a marker, draw a line across both cables. Any shift in the line means the cable has slipped.

Stainless steel rope clamps for 3/32” cable - 2 per connection
3” cable turn-back minimum

Stainless steel thimble at all loop connections

Stainless steel turnbuckle
4x1/4 - s.w.l. @ 450lbs

Stainless steel eyebolt w/nut
9/16”ID x 1/4-20 stem
115,000 psi tensile

Sidewinder cable guide
SWT-15 for ½ stl. (24” o.c.)