

DUCT PROOFING AND CABLE INSTALLATION

Duct Proofing for Cable Pulling

Use 175 or 250 CFM Compressor for maximum line blowing potential. Choose pull line based on length of pull and tension expected.

1. Remove all plugs in terminator at exit end and only the plug being shot into on the entrance end.
2. Turn threaded nozzle into terminator until tight, without pull line or missiles to blow any debris or water which might have collected.
3. Open gate on nozzle to apply air to innerduct. Close gate after any debris or water has been blown out.
4. Unscrew nozzle and thread pull line through eyelet in nozzle and tie to line blowing missile. Place pull line reel on stand for feeding.
5. Place line blowing missile into open innerduct and carefully open gate on nozzle.
6. Feed pull line off reel and keep slight tension to avoid rope packing in innerduct.
7. When using flat tape as pull line, use twisted blow line (RP142) to blow in and retrieve flat tape.

Proofing for Jetting Cable

Use 375 CFM compressor for best results

1. Attach polyethylene feed tube (1" SDR 13.5 for 4 way and 1 3/4" SDR 13.5 for 3 way) with coupling recommended for high speed air blowing systems to empty innerduct extension on jet through terminator.
2. Assemble coupling according to high speed blowing system manufacturers recommended instructions.
3. Attach opposite end of polyethylene feed to high speed air speed machine.
4. Plug all unused holes in the Multi-Gard terminator at entry point and remove all plugs at exit terminator. Apply 100 -110 PSI to the Multi-Gard innerduct. Close the air output valve and stop compressor. The innerduct is acceptable if a loss of 20 PSI or less happens within 2 minutes of pressurization. **WARNING: NO PERSONNEL IN MANHOLES DURING PRESSURE TEST.**

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Cable Installation Using Pulling Equipment

The low coefficient of friction of pre lubricated PVC will allow pulls in excess of 4000' for Multi-Gard unless abrupt changes are in the route. Pull speeds of 100-200 ft. per minute are acceptable.

Cable pulling operations:

1. Multi-Gard innerducts are pre lubricated. Additional Polywater lubricant may be used for longer pulls.
2. Align the pull blocks or sheaves so the pull line passes directly and freely from the innerduct entrance. Cable should be fed from the top of the reel.
3. Choose swivel with load rating at or below maximum pull limit. Attach swivel between pull line and cable pulling eye or basket grip.
4. Maintain constant pulling tension to avoid stop/start. A monitoring device should be used to avoid over tensioning the cable. Most outside plant cables are rated for 600 lbs. Check with cable manufacturer for specific pulling tension.
5. Leave slack in each handhole where racking will be needed.

Innerduct Racking Using Pulling Equipment

The racking operation should be done after the cable has been pulled through the Multi-Gard.

1. Place PVC corrugated split innerduct over slack cable.
2. Secure cable in innerduct against handhole/manhole wall out of way.

Cable Installation Using Jetting Equipment

Multi-Gard with the new Air Gard™ gasket and pre lubed PVC innerduct is ideal for jetting cable.

Jetting cable operations:

1. Set up jetting equipment for easy accessibility to PE innerduct secured to Multi-Gard.
2. Blow foam carriers through innerduct until clean and dry.
3. Multi-Gard is now ready for jetting according to high speed air blowing system manufacturer's instructions.
4. Leave slack in each handhole where racking will be needed.

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Innerduct Racking Using Jetting Equipment

The racking operation should be done before the cable has been jetted through the Multi-Gard, unless slack is needed in vault.

1. Cut innerducts square and attach PE racking innerduct to PVC jet terminator using coupling rated for high speed air blowing system.
2. Assemble coupling according to coupling manufacturers' recommended instructions.
3. Rack innerduct against sides of vault at a maximum 18" radius and attach PE innerduct to jet terminator on opposite side of vault.