

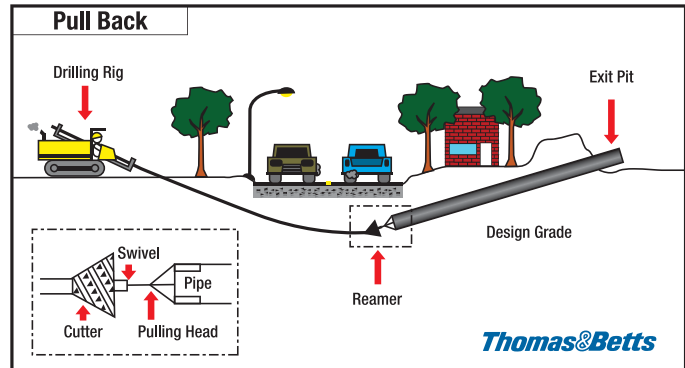
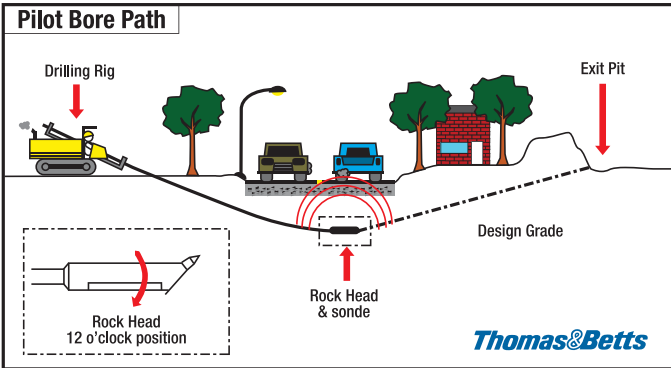
# Carlton<sup>®</sup> Bore-Gard<sup>®</sup>

## PVC Trenchless Raceway

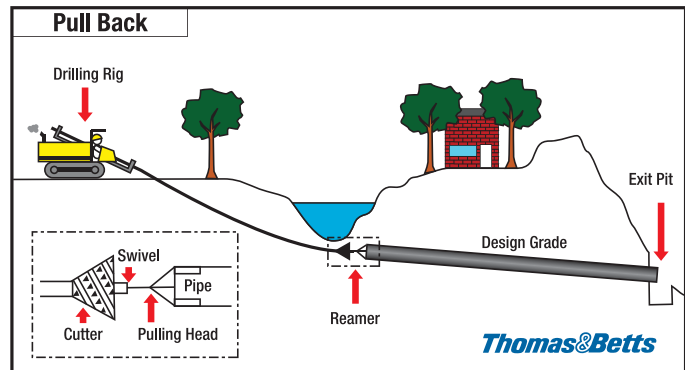
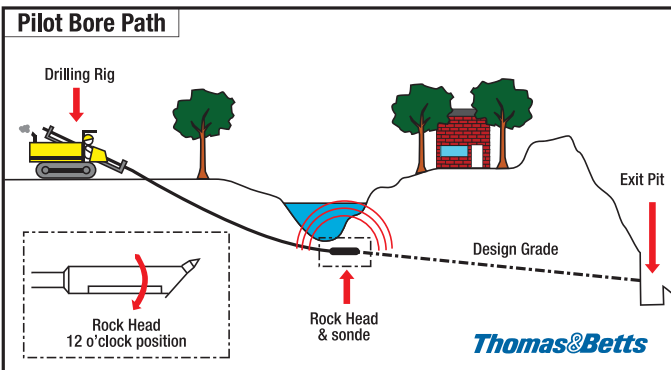


**Thomas & Betts**

# Carlton® Bore-Gard® PVC Trenchless Raceway



Bore-Gard® can be used under highways without disrupting traffic.



Bore-Gard® can be used in an environmentally fragile area, being kind to mother nature.

## 10 solid reasons to buy Bore-Gard®

- 01** Lower overall installed cost - simpler handling, faster assembly, lower labour costs.
- 02** Lower freight cost - truckload of 4" HDPE is 6,250 feet - truckload of 4" Bore-Gard is 12,480 feet.
- 03** Greater internal fill capacity - Bore-Gard does not distort into an oval during spooling.
- 04** No wasted product - using HDPE, the last several wraps are scrapped.
- 05** Easier to transport, especially over rough terrain - one length of Bore-Gard can be carried by one person.
- 06** Strong and flexible for direction drilling applications.
- 07** Use standard PVC fittings - Bore-Gard is made using standard schelude 40 dimensions - can be cemented. HDPE has to be fusion welded to PVC.
- 08** No reel handling equipment required - HDPE is shipped on large reels requiring special handling equipment - Bore-Gard can be unloaded by hand.
- 09** No fusion splicing equipment required to join two pipe sections - Bore-Gard is joined together by one person.
- 10** No costly reels to return - with Bore-Gard, there are no reels to handle. HDPE reels must be returned for reuse.

## Bore-Gard® Specifications

**Axial Tensile Rating**  
7,000 to 14,000 lb.

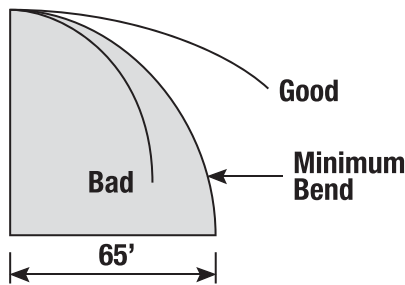
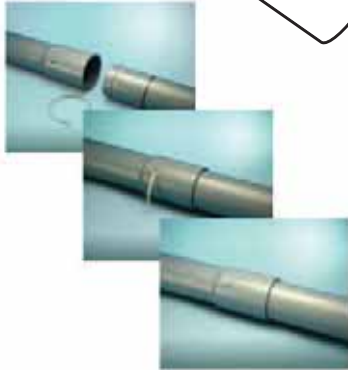
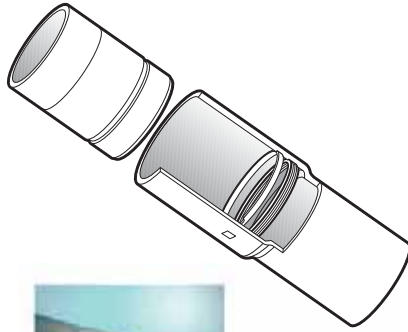
**Minimum Bend Radius**  
65 feet  
Assembly force 20 lb.

**Seal Pressure Rating**  
75 psi

**Stiffness Rating**  
600 lb./in/in@5%defl.

**Thomas&Betts**

# Carlon® Bore-Gard® PVC Trenchless Raceway



## Feature

3" – 7,000 pull-apart rating  
4" – 8,700 pull-apart rating  
5" – 11,300 pull-apart rating  
6" – 14,000 pull-apart rating

## Benefit

Withstands pulling and bending forces of directional drilling.  
Installations of 1,000 feet are possible.

## Feature

75 psi seal rating

## Benefit

Seals out ground water.  
Seals out drilling fluid.  
Seals in air for jetting a missile or mouse.  
Enables being buried as deep as 150 feet.  
Low insertion force.

## Feature

Restrained joint in bell:  
Locking Ring/Groove design

## Benefit

Strong joint design.  
Fast assembly of pipes (avg. 15 seconds!).  
Smooth O.D. transition from pipe to bell/joint.  
Reduction of drag in bore hole from smooth bell transition.

## Feature

65 foot Bend Radius

## Benefit

Good for long bores.  
Enables tight bending in small areas.  
Can bend as tight as smallest drill rods.

## Feature

Offered in 10 ft. or 20 ft. lengths

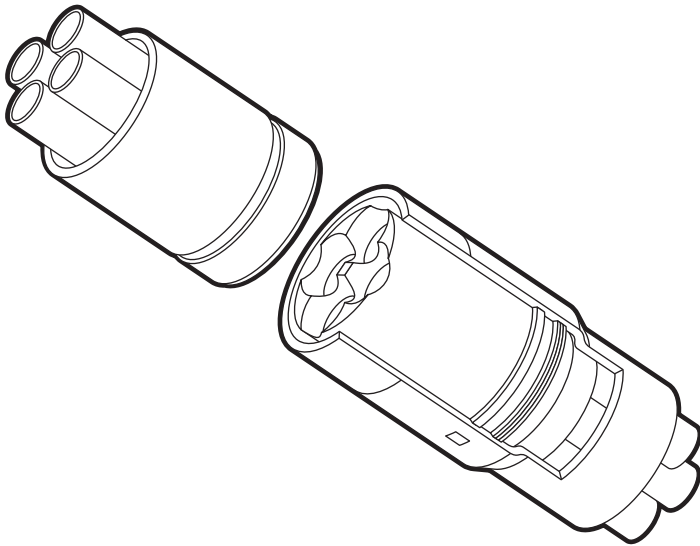
## Benefit

Easy to transport by hand or by truck.  
No large and expensive reel handling equipment required.  
Fits into small spaces.  
Waste is minimized.  
Straight lengths do not coil or "cork screw" like HDPE on a reel.  
No expensive line-straightening equipment required.  
No safety concerns of cutting bundle banding.

## Bore-Gard® Schedule 40

Cat. No.	Description	Overall Length (ft)	Lay Length	Dimensions O.D. (in.)	Dimensions I.D. (in.)	Pkg. Qty. (ft/bundle)	Bundles per Truckload	Feet per Truckload	Wt. per 100 ft (lb.)	Min. Bend Radius (ft)	Insertion Force (lb.)	Seal Pressure Rating (P.S.I.)	Joint Pull Rating (lb.)	Typical Crush lb. (@ 30% deflection)	UL Std. 651 & NEMA TC2 Min. Crush (lb.)
BG340SP-010	3" Sch. 40 Bore-Gard	10	9'6"	3.50	3.0	350	56	19,600	164	65	20	75	7,000	1,225	1,000
BG340SP-020	3" Sch. 40 Bore-Gard	20	19'6"	3.50	3.0	700	28	19,600	164	65	20	75	7,000	1,225	1,000
BG440SP-010	4" Sch. 40 Bore-Gard	10	9'6"	4.50	4.0	260	56	14,560	234	65	40	75	8,700	1,075	900
BG440SP-020	4" Sch. 40 Bore-Gard	20	19'6"	4.50	4.0	520	28	14,560	234	65	40	75	8,700	1,075	900
BG540SP-010	5" Sch. 40 Bore-Gard	10	9'6"	5.56	5.0	230	40	9,200	317	65	60	75	11,300	950	850
BG540SP-020	5" Sch. 40 Bore-Gard	20	19'6"	5.56	5.0	460	20	9,200	317	65	60	75	11,300	950	850
BG640SP-010	6" Sch. 40 Bore-Gard	10	9'6"	6.625	6.0	200	40	8,000	418	65	80	75	14,000	950	850
BG640SP-020	6" Sch. 40 Bore-Gard	20	19'6"	6.625	6.0	400	20	8,000	418	65	80	75	14,000	950	850

# Carlon® Multi-Gard® PVC Trenchless Raceway



## Multi-Gard® Specifications

- Withstands pulling and bending forces of directional drilling
- Fast assembly
- Eliminates labor related to gluing and screwing joints together
- For bores up to 500 feet
- Innerducts: 3-way or 4-way
- Easy to handle 20 foot lengths
- Type: Type 40 PVC outerduct
- Size: 4"
- Prelubricated innerducts
- Strong water-tight joints without cement
- Fits standard Schedule 40 fittings
- Compatible with Multi-Gard Type 40 PVC products

Cat. No.	Description	Length (ft)	Dimensions O.D. (in.)	Innerduct Dimensions I.D. (in.)	Pkg. Qty. (ft/bundle)	Bundles per Truckload	Feet per Truckload	Wt. per 100 ft (lb.)	Min. Bend Radius (ft)	Seal Pressure Rating (PSI.)	Maximum Pull Rating (lb.)
MFSS3B-020	3-way Boreable Multi-Gard	20	4.50	1.50	520	28	14,560	561	65	75	5000
MFSS4B-020	4-way Boreable Multi-Gard	20	4.50	1.19	520	28	14,560	565	65	75	5000

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