

# Elbows, sweeps and accessories

## Carlton® PVC conduit repair system

A job that normally takes 20 minutes – DONE in two minutes or less!

The new, revolutionary design Carlton® PVC Conduit Repair System significantly reduces the time and money associated with repairing broken PVC conduits, a.k.a. “stub-ups”, in concrete slabs. The system includes a line of couplings, adapters, reamers and plugs designed to enable contractors to quickly and easily repair broken PVC conduits without having to chip away and repour concrete, while still maintaining the inside diameter of the conduit. Simply cut off the broken conduit, ream the I.D. of the conduit and insert a coupling or adapter. It’s that easy. A job that normally takes 20 minutes can now be done in two minutes or less!

### Features:

- cULus Listed
- PVC repair fittings are listed in accordance with the NEC® and Section 352.6
- Non-metallic couplings, adapters and plugs won’t rust or corrode
- Available in sizes 1/2" through 2"

### Benefits:

- Saves time and money
- Maintains inside diameter of conduit
- Metallic reamers for extra strength, durability and longer life
- Quickly and easily repair broken PVC conduits

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## Elbows, sweeps and accessories

### PVC conduit repair system instructions

01 Cut broken conduit off flush.

02 Insert plug to keep conduit clean/dry through balance of rough-in. Once rough-in is complete, remove plug and **continue with Step 3.**

03 With reamer tool and standard 1/2" drill, ream I.D. of conduit. It is recommended to use a variable speed drill. Use slower speed to avoid overheating the conduit.

04 The guide will direct the cutter; the stop will touch when completed.

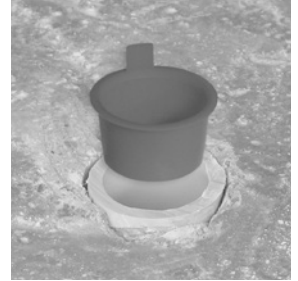
05 Insert the coupling and cement into place using the cement manufacturer's instructions below.

- A. Clean socket I.D. and spigot O.D. of dirt and moisture.
- B. Apply a uniform coat of cement to spigot end and push onto socket bottom, rotating 1/4 turn.
- C. Allow time to set before disturbing. This will depend upon temperature.

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#### Alternative to conduit repairs:

Prior to concrete pour, measure and saw cut all conduit stub-ups to the thickness of the concrete pour. Insert plugs. Pour concrete flush to the conduit. When pour is complete, remove plugs and proceed with Step 3. This alternative method saves time/money by eliminating the need for transitions or use of metal elbows.

05



Apply a uniform coat of cement.



Insert fitting.



Rotate quarter turn.

## Carlton® rigid non-metallic conduit (RNC) fittings and accessories

Carlton® Schedule 40 and Schedule 80 fittings are designed for use aboveground and underground as described in the National Electrical Code®.

- **Ease of installation** – Non-metallic fittings are 1/4 to 1/5 the weight of metallic systems, can be installed in less than half the time and are easily fabricated on the job.
- **Safety** – Non-metallic fittings are nonconductive, assuring a safe system.
- **Impact Resistant** – Schedule 40 and Schedule 80 non-metallic fittings are resistant to sunlight and are listed for exposed for outdoor usage. The use of expansion fittings allows the system to expand and contract with temperature variations.
- **Corrosion Resistant** – Carlton® fittings are non-metallic and will not rust or corrode. Carlton® non-metallic Schedule 40 and Schedule 80 elbows are manufactured to NEMA TC-2, Federal specification WC1094A and UL 651 specifications. Fittings are manufactured to NEMA TC-3, Federal specification WC1094A and UL514B. Both conduit and fittings carry respective UL or ETL Listings and UL or ETL labels.

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# Elbows, sweeps and accessories

## Schedule 40 elbows – standard radius



Item	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
<p>90° elbow</p>	UA9AD	UA9ADB	1/2	50	50
	UA9ADR-CAR	UA9ADB	1/2	25	50
	UA9AE	UA9AEB	3/4	25	25
	UA9AFR-CTN	UA9AFB-CTN	1	25	25
	UA9AG	UA9AGB	1 1/4	20	20
	UA9AH	UA9AHB	1 1/2	25	25
	UA9AJ	UA9AJB	2	20	20
	UA9AK-CAR	UA9AKB-CAR	2 1/2	10	10
	UA9AL	UA9ALB	3	1	5
	UA9AM	UA9AMB	3 1/2	1	20
	UA9AN	UA9ANB	4	1	1
	UA9AP	UA9APB	5	1	1
	UA9AR	UA9ARB	6	1	1

<p>45° elbow</p>	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
	UA7AD	UA7ADB	1/2	50	50
	UA7AE	UA7AEB	3/4	25	25
	UA7AF	UA7AFB	1	20	20
	UA7AF-CAR	UA7AFB	1	15	20
	UA7AG	UA7AGB	1 1/4	20	20
	UA7AH	UA7AHB	1 1/2	20	20
	UA7AJ	UA7AJB	2	20	20
	UA7AJ-CAR	—	2	4	—
	UA7AK	UA7AKB	2 1/2	20	20
	UA7AL	UA7ALB	3	5	25
	UA7AM	UA7AMB	3 1/2	1	20
	UA7AN	UA7ANB	4	1	20
UA7AP	UA7APB	5	1	1	
UA7AR	UA7ARB	6	1	1	

<p>30° elbow</p>	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
	UA6AD	UA6ADB	1/2	50	50
	UA6AE	UA6AEB	3/4	25	25
	UA6AF	UA6AFB	1	25	1
	UA6AG	UA6AGB	1 1/4	20	20
	UA6AH	UA6AHB	1 1/2	25	1
	UA6AJ	UA6AJB	2	20	20
	UA6AK	UA6AKB	2 1/2	10	20
	UA6AL	UA6ALB	3	1	1
	UA6AM	UA6AMB	3 1/2	1	1
	UA6AN	UA6ANB	4	1	1
	UA6AP	UA6APB	5	1	1
	UA6AR	UA6ARB	6	1	1

<p>22 1/2° elbow</p>	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
	UA5AD	—	1/2	1	—
	UA5AE	—	3/4	1	—
	UA5AF	—	1	1	—
	UA5AG	—	1 1/4	1	—
	UA5AH	—	1 1/2	1	—
	UA5AJ	UA5AJB	2	25	1
	UA5AK	—	2 1/2	20	—
	UA5AL	UA5ALB	3	5	1
	UA5AM	—	3 1/2	1	—
	UA5AN	UA5ANB	4	1	1
	UA5AP	UA5APB	5	1	1
	UA5AR	UA5ARB	6	1	1

Item	Cat. No.	Box type included	Size	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
<p>11 1/4° elbow</p>	UA3AD	—	1/2	1	—
	UA3AE	—	3/4	1	—
	UA3AF	—	1	1	—
	UA3AG	—	1 1/4	1	—
	UA3AH	—	1 1/2	1	—
	UA3AJ	—	2	1	—
	UA3AK	—	2 1/2	1	—
	UA3AL	—	3	1	—
	UA3AM	—	3 1/2	1	—
	UA3AN	UA3ANB	4	1	1
	UA3AP	—	5	1	—
	UA3AR	—	6	1	—

Available in plain and integral belled end for use with non-metallic solvent weld fittings.

### Standard radius elbow dimensions (per NEC®)

Size	(in.)	B Minus (Radius)		C Min. (in.)
		(in.)	(in.)	
1/2	.840	4	1 1/2	
3/4	1.050	4 1/2	1 1/2	
1	1.315	5 3/4	1 7/8	
1 1/4	1.660	7 1/4	2	
1 1/2	1.900	8 1/4	2	
2	2.375	9 1/2	2	
2 1/2	2.875	10 1/2	3	
3	3.500	13	3 1/8	
3 1/2	4.000	15	3 1/4	
4	4.500	16	3 3/8	
5	5.563	24	3 5/8	
6	6.625	30	3 3/4	

### Integral belled end dimensions

Trade Size (in.)	A (in.) at Entrance		B (in.) at Bottom		C (in.) Socket Depth	
	Max.	Min.	Max.	Min.	Max.	Min.
1/2	0.86	0.844	0.844	0.828	1.500	0.652
3/4	1.074	1.054	1.056	1.036	1.500	0.719
1	1.340	1.320	1.320	1.300	1.875	0.875
1 1/4	1.689	1.665	1.667	1.643	2.000	0.938
1 1/2	1.930	1.906	1.906	1.882	2.000	1.062
2	2.405	2.381	2.381	2.357	2.000	1.125
2 1/2	2.905	2.875	2.883	2.853	3.000	1.469
3	3.530	3.500	3.507	3.477	3.125	1.594
3 1/2	4.065	3.965	4.007	3.977	3.250	1.687
4	4.565	4.465	4.506	4.476	3.375	1.750
5	5.643	5.543	5.583	5.523	3.625	1.937
6	6.708	6.608	6.644	6.584	3.750	2.125

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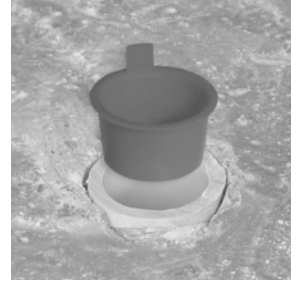
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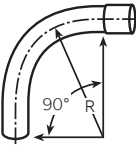
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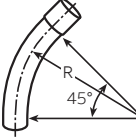
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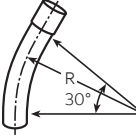
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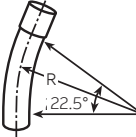
## Schedule 40 elbows – standard radius

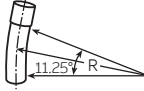


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				Std. Ctn.	Std. Ctn.
 90° elbow	UA9AD	UA9ADB	1/2	50	50
	UA9ADR-CAR	UA9ADB	1/2	25	50
	UA9AE	UA9AEB	3/4	25	25
	UA9AFR-CTN	UA9AFB-CTN	1	25	25
	UA9AG	UA9AGB	1 1/4	20	20
	UA9AH	UA9AHB	1 1/2	25	25
	UA9AJ	UA9AJB	2	20	20
	UA9AK-CAR	UA9AKB-CAR	2 1/2	10	10
	UA9AL	UA9ALB	3	1	5
	UA9AM	UA9AMB	3 1/2	1	20
	UA9AN	UA9ANB	4	1	1
	UA9AP	UA9APB	5	1	1
	UA9AR	UA9ARB	6	1	1

 45° elbow	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
	UA7AD	UA7ADB	1/2	50	50
	UA7AE	UA7AEB	3/4	25	25
	UA7AF	UA7AFB	1	20	20
	UA7AF-CAR	UA7AFB	1	15	20
	UA7AG	UA7AGB	1 1/4	20	20
	UA7AH	UA7AHB	1 1/2	20	20
	UA7AJ	UA7AJB	2	20	20
	UA7AJ-CAR	—	2	4	—
	UA7AK	UA7AKB	2 1/2	20	20
	UA7AL	UA7ALB	3	5	25
	UA7AM	UA7AMB	3 1/2	1	20
	UA7AN	UA7ANB	4	1	20
UA7AP	UA7APB	5	1	1	
UA7AR	UA7ARB	6	1	1	

 30° elbow	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
	UA6AD	UA6ADB	1/2	50	50
	UA6AE	UA6AEB	3/4	25	25
	UA6AF	UA6AFB	1	25	1
	UA6AG	UA6AGB	1 1/4	20	20
	UA6AH	UA6AHB	1 1/2	25	1
	UA6AJ	UA6AJB	2	20	20
	UA6AK	UA6AKB	2 1/2	10	20
	UA6AL	UA6ALB	3	1	1
	UA6AM	UA6AMB	3 1/2	1	1
	UA6AN	UA6ANB	4	1	1
	UA6AP	UA6APB	5	1	1
	UA6AR	UA6ARB	6	1	1

 22 1/2° elbow	Cat. No.	Box type included	Size (in.)	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
	UA5AD	—	1/2	1	—
	UA5AE	—	3/4	1	—
	UA5AF	—	1	1	—
	UA5AG	—	1 1/4	1	—
	UA5AH	—	1 1/2	1	—
	UA5AJ	UA5AJB	2	25	1
	UA5AK	—	2 1/2	20	—
	UA5AL	UA5ALB	3	5	1
	UA5AM	—	3 1/2	1	—
	UA5AN	UA5ANB	4	1	1
	UA5AP	UA5APB	5	1	1
	UA5AR	UA5ARB	6	1	1

Item	Cat. No.	Box type included	Size	Plain end	Belled end
				Std. Ctn.	Std. Ctn.
 11 1/4° elbow	UA3AD	—	1/2	1	—
	UA3AE	—	3/4	1	—
	UA3AF	—	1	1	—
	UA3AG	—	1 1/4	1	—
	UA3AH	—	1 1/2	1	—
	UA3AJ	—	2	1	—
	UA3AK	—	2 1/2	1	—
	UA3AL	—	3	1	—
	UA3AM	—	3 1/2	1	—
	UA3AN	UA3ANB	4	1	1
	UA3AP	—	5	1	—
	UA3AR	—	6	1	—

Available in plain and integral belled end for use with non-metallic solvent weld fittings.

### Standard radius elbow dimensions (per NEC®)

Size	(in.)	B Minus (Radius)		C Min. (in.)
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2	2.405	2.381	2.381	2.357	2.000	1.125
2 1/2	2.905	2.875	2.883	2.853	3.000	1.469
3	3.530	3.500	3.507	3.477	3.125	1.594
3 1/2	4.065	3.965	4.007	3.977	3.250	1.687
4	4.565	4.465	4.506	4.476	3.375	1.750
5	5.643	5.543	5.583	5.523	3.625	1.937
6	6.708	6.608	6.644	6.584	3.750	2.125

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