



MADE IN USA



TrueRadius™

VS

Segmented Radius

Trench Drain Reference Guide

TABLE OF DESIGN

This booklet is to provide designers, contractors, and sales guidance on radius trench drain layout and the visual impact. It is based on the following points.



Radius drains are placed in locations where the grate and channel openings must meet heel proof or ADA compliance.



The drain radius or curve is to be smooth for aesthetic requirements.



Grates cannot be cut as the continuous pattern will be disrupted.



As the radius becomes tighter, straight channel sections become more segmented in a curve requiring fabricated bends to be made.



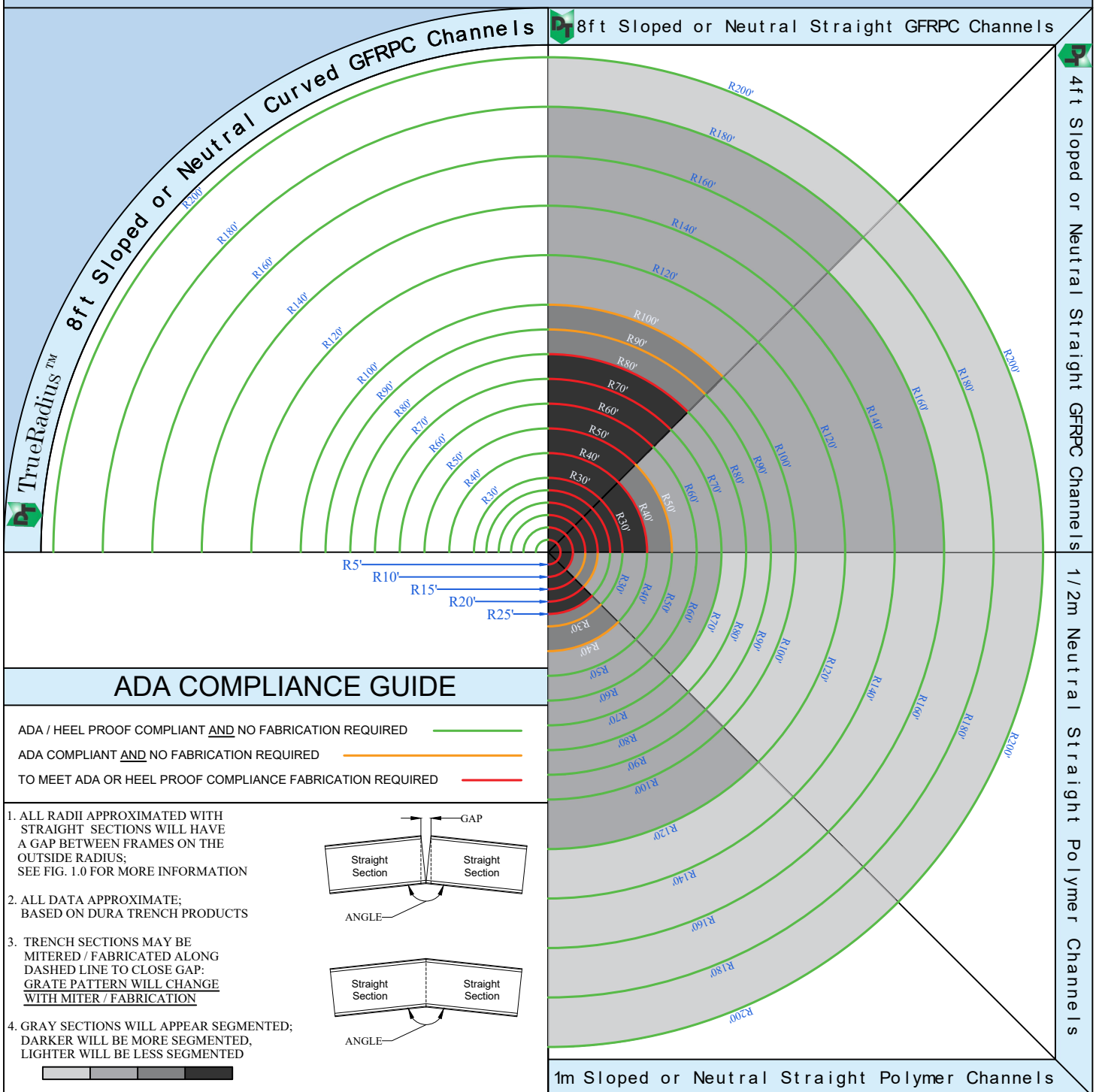
TrueRadius™ is the solution.



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FIG 1.1

2" WIDE TRENCH DRAIN; SEGMENTED RADIUS GUIDE

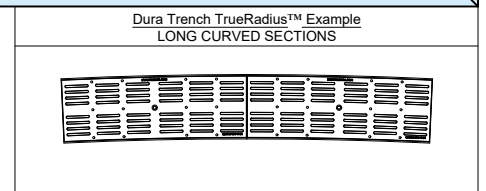
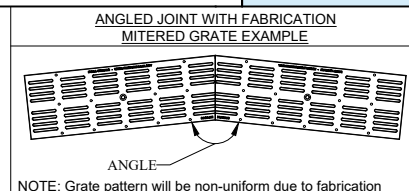
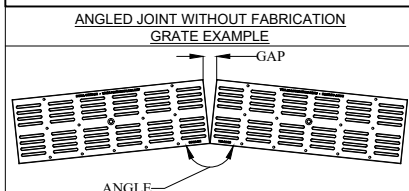
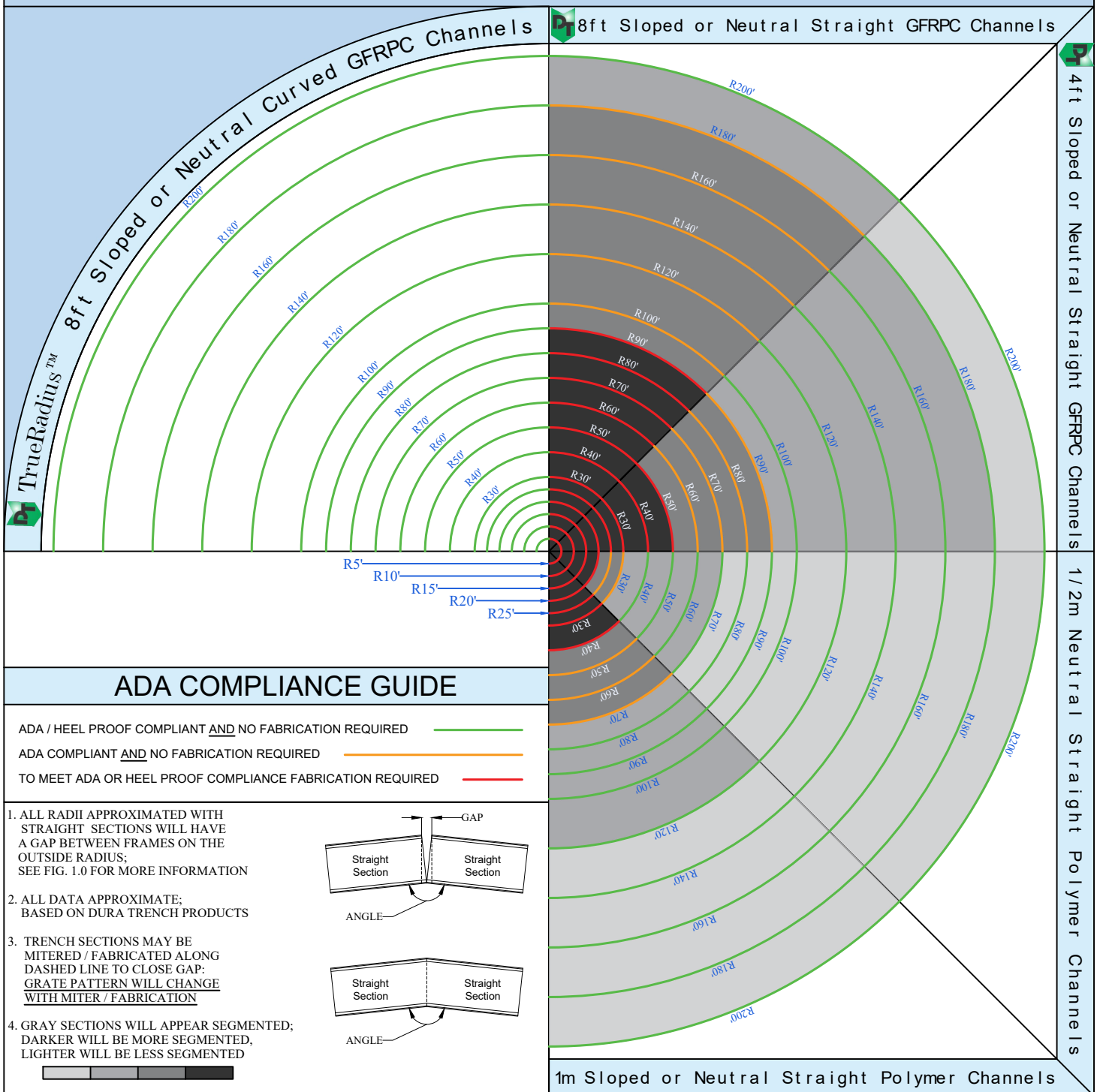




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FIG 1.2

4" WIDE TRENCH DRAIN; SEGMENTED RADIUS GUIDE

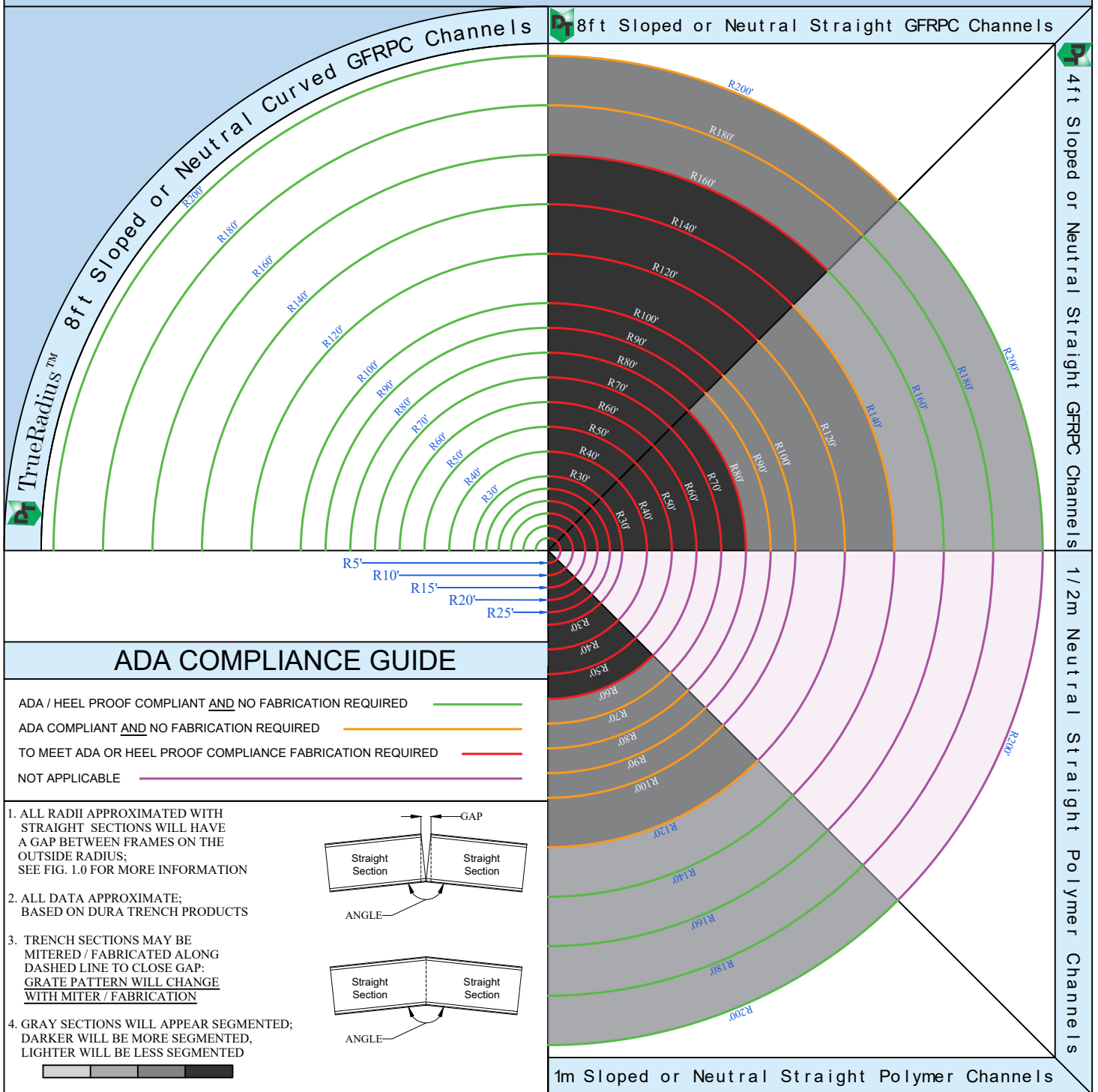




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FIG 1.3

6" WIDE TRENCH DRAIN; SEGMENTED RADIUS GUIDE

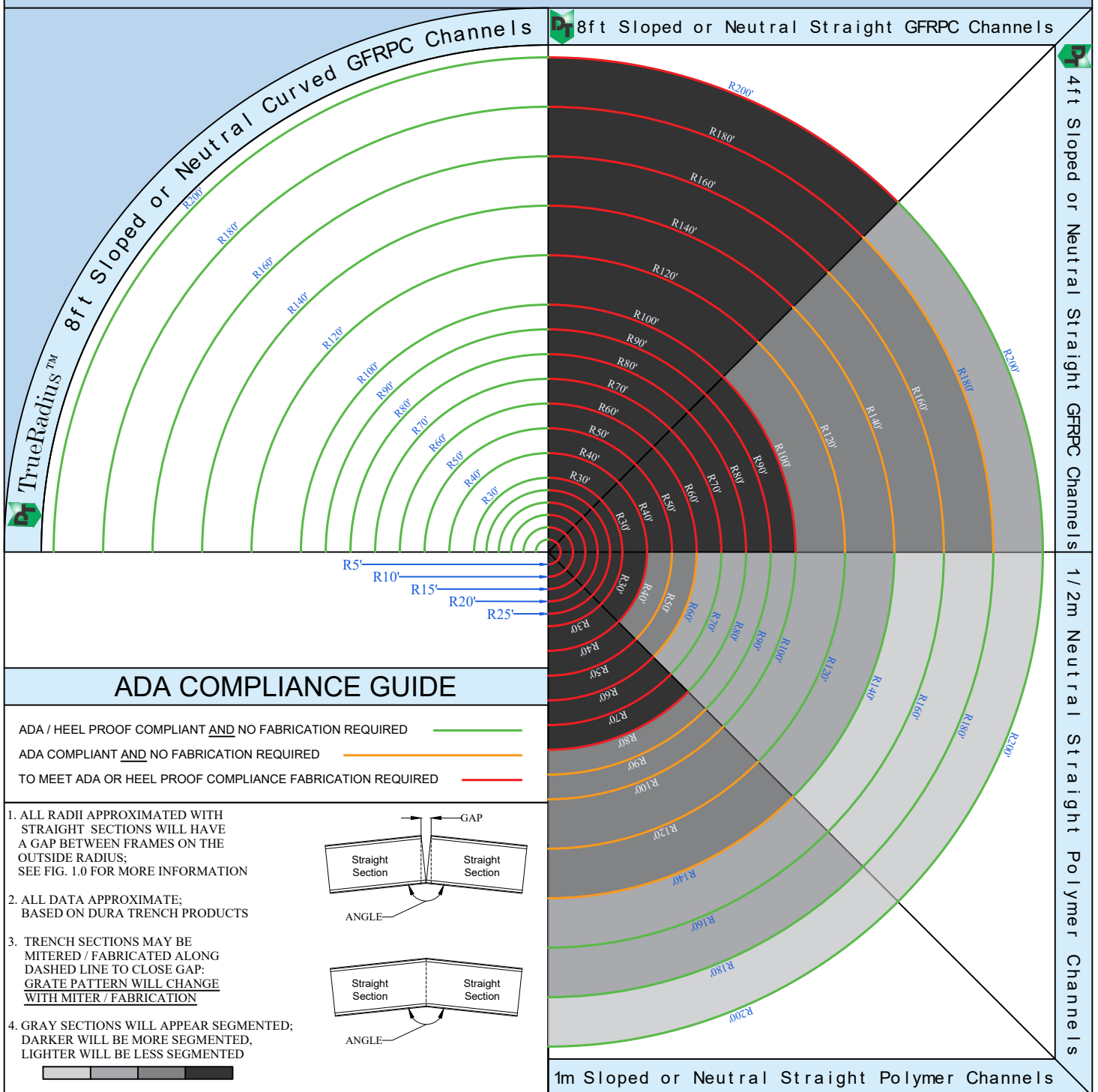




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FIG 1.4

8" WIDE TRENCH DRAIN; SEGMENTED RADIUS GUIDE

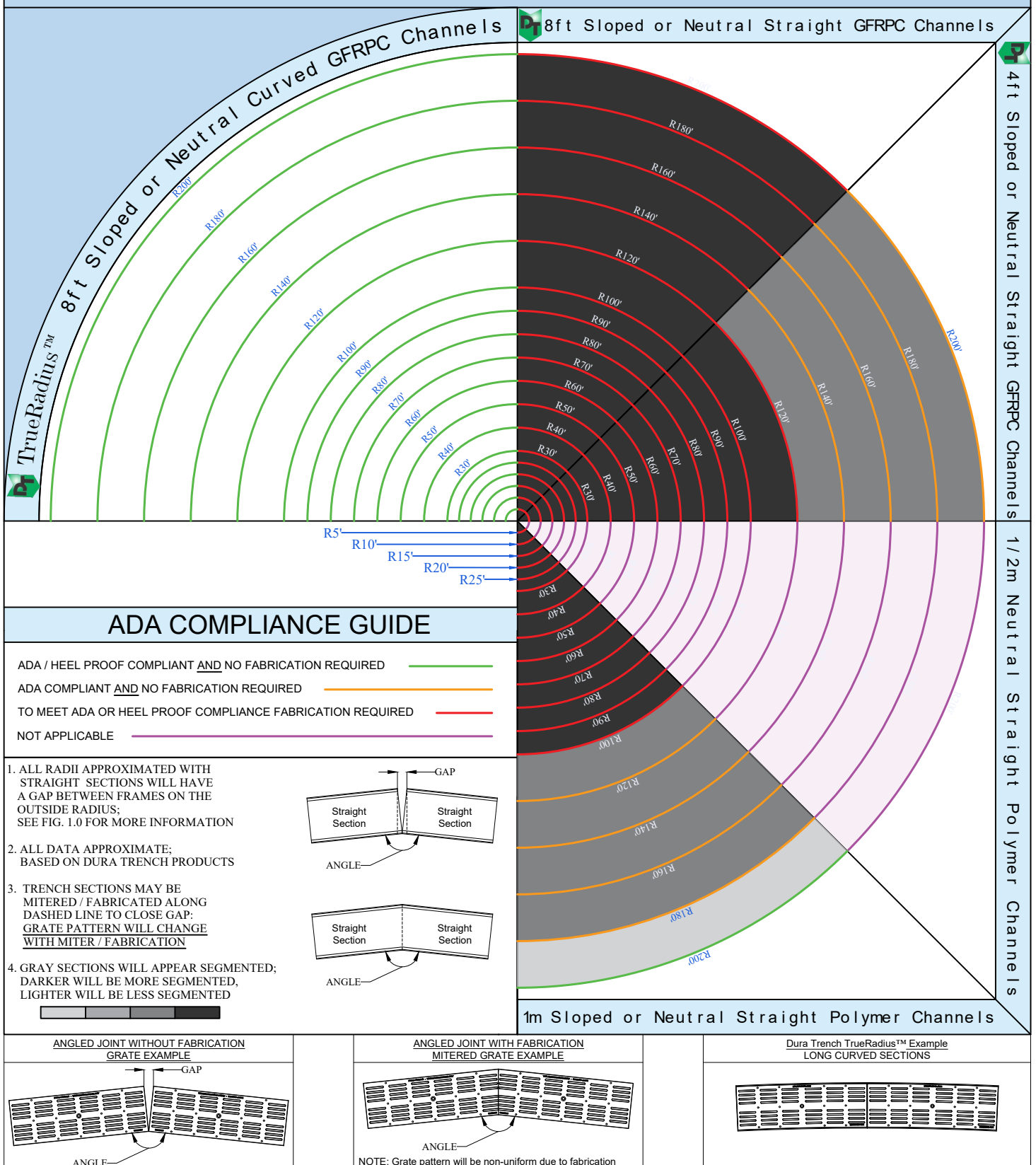




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FIG 1.5

10" WIDE TRENCH DRAIN; SEGMENTED RADIUS GUIDE

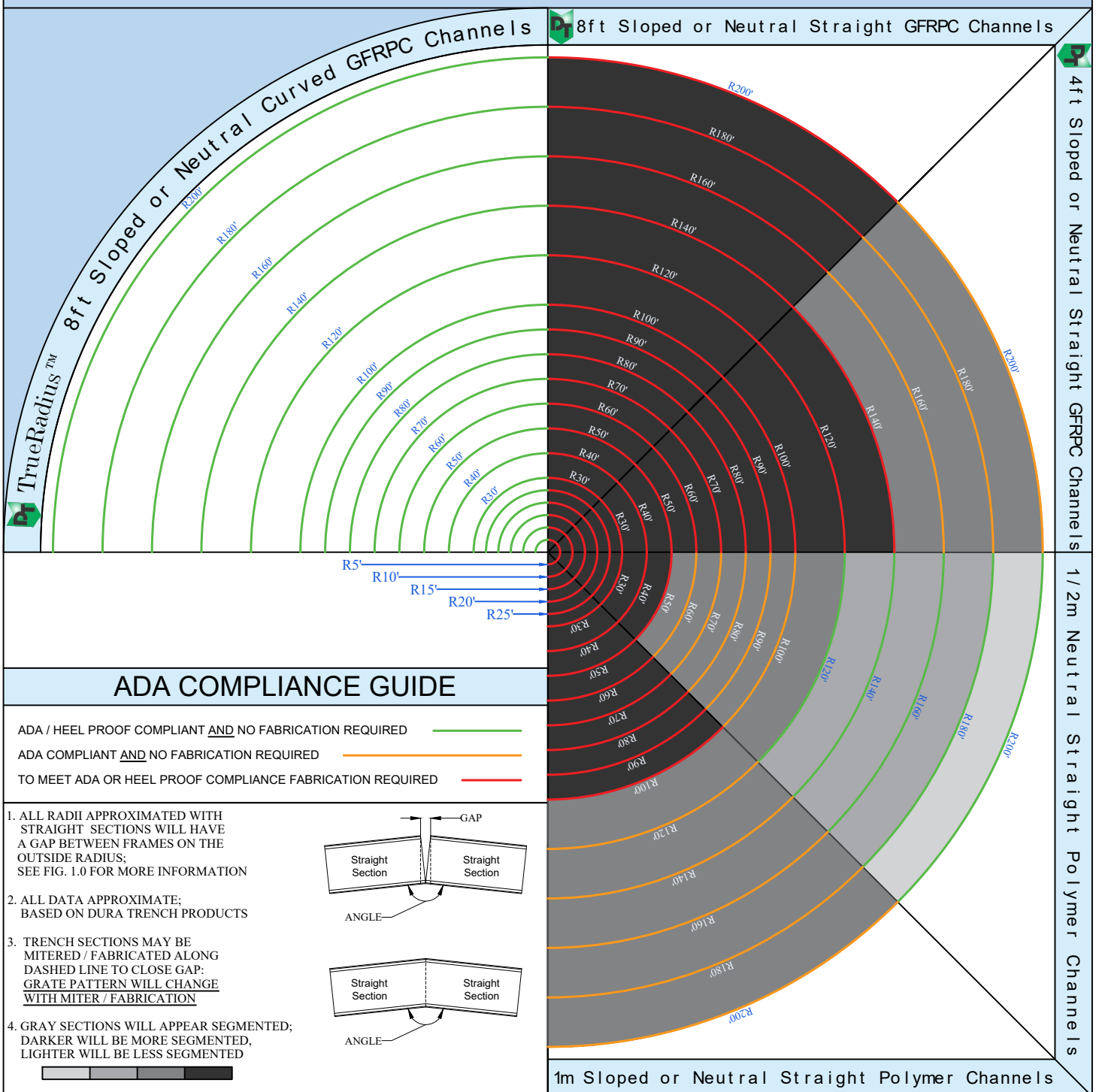




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FIG 1.6

12" WIDE TRENCH DRAIN; SEGMENTED RADIUS GUIDE





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FIG 1.0

STRAIGHT TRENCH DRAIN RADIUS APPROXIMATION REFERENCE

2" WIDE TRENCH DRAIN					4" WIDE TRENCH DRAIN				
TRENCH RADIUS	TRENCH SECTION LENGTH				TRENCH RADIUS	TRENCH SECTION LENGTH			
	4'	8'	1/2 Meter Polymer	1 Meter Polymer		4'	8'	1/2 Meter Polymer	1 Meter Polymer
5'	2-5/8" (133° Angle)	4-15/16" (81° Angle)	1-1/16" (161° Angle)	2-3/16" (142° Angle)	5'	4-3/16" (133° Angle)	7-15/16" (81° Angle)	1-11/16" (161° Angle)	3-3/8" (142° Angle)
10'	1-5/16" (157° Angle)	2-5/8" (133° Angle)	1/2" (121° Angle)	1-1/16" (161° Angle)	10'	2-1/8" (157° Angle)	4-3/16" (133° Angle)	13/16" (171° Angle)	1-11/16" (161° Angle)
15'	7/8" (165° Angle)	1 3/4" (149° Angle)	3/8" (174° Angle)	11/16" (167° Angle)	15'	1 3/8" (165° Angle)	2-13/16" (149° Angle)	9/16" (174° Angle)	1-1/8" (167° Angle)
20'	5/8" (169° Angle)	1-5/16" (157° Angle)	1/4" (175° Angle)	1/2" (171° Angle)	20'	1-1/16" (169° Angle)	2-1/8" (157° Angle)	7/16" (175° Angle)	7/8" (171° Angle)
25'	1/2" (171° Angle)	1-1/16" (162° Angle)	3/16" (176° Angle)	7/16" (172° Angle)	25'	13/16" (171° Angle)	1-11/16" (162° Angle)	5/16" (176° Angle)	11/16" (172° Angle)
30'	7/16" (172° Angle)	7/8" (165° Angle)	3/16" (177° Angle)	3/8" (174° Angle)	30'	11/16" (172° Angle)	1-3/8" (165° Angle)	1/4" (177° Angle)	9/16" (174° Angle)
40'	5/16" (174° Angle)	5/8" (169° Angle)	1/8" (178° Angle)	1/4" (175° Angle)	40'	1/2" (174° Angle)	1-1/16" (169° Angle)	3/16" (178° Angle)	7/16" (175° Angle)
50'	1/4" (175° Angle)	1/2" (171° Angle)	1/8" (178° Angle)	3/16" (176° Angle)	50'	7/16" (175° Angle)	13/16" (171° Angle)	3/16" (178° Angle)	5/16" (176° Angle)
60'	3/16" (176° Angle)	7/16" (172° Angle)	1/16" (178° Angle)	3/16" (177° Angle)	60'	3/8" (176° Angle)	11/16" (172° Angle)	1/8" (178° Angle)	5/16" (177° Angle)
70'	3/16" (177° Angle)	3/8" (173° Angle)	1/16" (179° Angle)	1/8" (177° Angle)	70'	5/16" (177° Angle)	5/8" (173° Angle)	1/8" (179° Angle)	1/4" (177° Angle)
80'	3/16" (177° Angle)	5/16" (174° Angle)	1/16" (179° Angle)	1/8" (178° Angle)	80'	1/4" (177° Angle)	1/2" (174° Angle)	1/8" (179° Angle)	3/16" (178° Angle)
90'	1/8" (177° Angle)	5/16" (175° Angle)	1/16" (179° Angle)	1/8" (178° Angle)	90'	1/4" (177° Angle)	7/16" (175° Angle)	1/16" (179° Angle)	3/16" (178° Angle)
100'	1/8" (178° Angle)	1/4" (175° Angle)	1/16" (179° Angle)	1/8" (178° Angle)	100'	3/16" (178° Angle)	7/16" (175° Angle)	1/16" (179° Angle)	3/16" (178° Angle)
120'	1/8" (178° Angle)	3/16" (176° Angle)	1/16" (179° Angle)	1/16" (179° Angle)	120'	3/16" (178° Angle)	3/8" (176° Angle)	1/16" (179° Angle)	1/8" (178° Angle)
140'	1/16" (178° Angle)	3/16" (177° Angle)	1/16" (179° Angle)	1/16" (179° Angle)	140'	1/8" (178° Angle)	5/16" (177° Angle)	1/16" (179° Angle)	1/8" (179° Angle)
160'	1/16" (179° Angle)	3/16" (177° Angle)	1/16" (179° Angle)	1/16" (179° Angle)	160'	1/8" (179° Angle)	1/4" (177° Angle)	1/16" (179° Angle)	1/8" (179° Angle)
180'	1/16" (179° Angle)	1/8" (177° Angle)	1/16" (179° Angle)	1/16" (179° Angle)	180'	1/8" (179° Angle)	1/4" (177° Angle)	1/16" (179° Angle)	1/8" (179° Angle)
200'	1/16" (179° Angle)	1/8" (178° Angle)	<1/16" (~180° Angle)	1/16" (179° Angle)	200'	1/8" (179° Angle)	3/16" (178° Angle)	1/16" (~180° Angle)	1/16" (179° Angle)

6" WIDE TRENCH DRAIN					8" WIDE TRENCH DRAIN				
TRENCH RADIUS	TRENCH SECTION LENGTH				TRENCH RADIUS	TRENCH SECTION LENGTH			
	4'	8'	1/2 Meter Polymer	1 Meter Polymer		4'	8'	1/2 Meter Polymer	1 Meter Polymer
5'	6-7/8" (133° Angle)	13-1/16" (81° Angle)	N/A	5-11/16" (142° Angle)	5'	8-1/2" (133° Angle)	16-1/8" (81° Angle)	3-1/4" (161° Angle)	6-1/2" (142° Angle)
10'	3-7/16" (157° Angle)	6-7/8" (133° Angle)		2-13/16" (161° Angle)	10'	4-1/4" (157° Angle)	8-1/2" (133° Angle)	1-5/8" (171° Angle)	3-1/4" (161° Angle)
15'	2-5/16" (165° Angle)	4-5/8" (149° Angle)		1-7/8" (167° Angle)	15'	2-13/16" (165° Angle)	5-11/16" (149° Angle)	1-1/16" (174° Angle)	2-3/16" (167° Angle)
20'	1-3/4" (169° Angle)	3-7/16" (157° Angle)		1-7/16" (171° Angle)	20'	2-1/8" (169° Angle)	4-1/4" (157° Angle)	13/16" (175° Angle)	1-5/8" (171° Angle)
25'	1-3/8" (171° Angle)	2-3/4" (162° Angle)		1-1/8" (172° Angle)	25'	1-11/16" (171° Angle)	3-3/8" (162° Angle)	5/8" (176° Angle)	1-5/16" (172° Angle)
30'	1-1/8" (172° Angle)	2-5/16" (165° Angle)		15/16" (174° Angle)	30'	1-7/16" (172° Angle)	2-13/16" (165° Angle)	9/16" (177° Angle)	1-1/16" (174° Angle)
40'	7/8" (174° Angle)	1-3/4" (169° Angle)		11/16" (175° Angle)	40'	1-1/16" (174° Angle)	2-1/8" (169° Angle)	7/16" (178° Angle)	13/16" (175° Angle)
50'	11/16" (175° Angle)	1-3/8" (171° Angle)		9/16" (176° Angle)	50'	7/8" (175° Angle)	1-11/16" (171° Angle)	5/16" (178° Angle)	5/8" (176° Angle)
60'	9/16" (176° Angle)	1-1/8" (172° Angle)		1/2" (177° Angle)	60'	11/16" (176° Angle)	1-7/16" (172° Angle)	1/4" (178° Angle)	9/16" (177° Angle)
70'	1/2" (177° Angle)	1" (173° Angle)		3/8" (177° Angle)	70'	5/8" (177° Angle)	1-3/16" (173° Angle)	3/16" (179° Angle)	7/16" (177° Angle)
80'	7/16" (177° Angle)	7/8" (174° Angle)		3/8" (178° Angle)	80'	9/16" (177° Angle)	1-1/16" (174° Angle)	3/16" (179° Angle)	7/16" (178° Angle)
90'	3/8" (177° Angle)	3/4" (175° Angle)		5/16" (178° Angle)	90'	1/2" (177° Angle)	15/16" (175° Angle)	3/16" (179° Angle)	3/8" (178° Angle)
100'	3/8" (178° Angle)	11/16" (175° Angle)		5/16" (178° Angle)	100'	7/16" (178° Angle)	7/8" (175° Angle)	3/16" (179° Angle)	5/16" (178° Angle)
120'	5/16" (178° Angle)	9/16" (176° Angle)		1/4" (178° Angle)	120'	3/8" (178° Angle)	11/16" (176° Angle)	1/8" (179° Angle)	1/4" (178° Angle)
140'	1/4" (178° Angle)	1/2" (177° Angle)		3/16" (179° Angle)	140'	5/16" (178° Angle)	5/8" (177° Angle)	1/8" (179° Angle)	1/4" (179° Angle)
160'	3/16" (179° Angle)	7/16" (177° Angle)		3/16" (179° Angle)	160'	1/4" (179° Angle)	9/16" (177° Angle)	1/8" (179° Angle)	3/16" (179° Angle)
180'	3/16" (179° Angle)	3/8" (177° Angle)		3/16" (179° Angle)	180'	1/4" (179° Angle)	1/2" (177° Angle)	1/16" (179° Angle)	3/16" (179° Angle)
200'	3/16" (179° Angle)	3/8" (178° Angle)		1/8" (179° Angle)	200'	3/16" (179° Angle)	7/16" (178° Angle)	1/16" (~180° Angle)	3/16" (179° Angle)

10" WIDE TRENCH DRAIN					12" WIDE TRENCH DRAIN				
TRENCH RADIUS	TRENCH SECTION LENGTH				TRENCH RADIUS	TRENCH SECTION LENGTH			
	4'	8'	1/2 Meter Polymer	1 Meter Polymer		4'	8'	1/2 Meter Polymer	1 Meter Polymer
5'	10-1/8" (133° Angle)	19-3/16" (81° Angle)	N/A	8-5/6" (142° Angle)	5'	11-1/16" (133° Angle)	22-3/16" (81° Angle)	4-9/16" (161° Angle)	9-1/8" (142° Angle)
10'	5-1/16" (157° Angle)	10-1/8" (133° Angle)		4-1/8" (161° Angle)	10'	5-7/8" (157° Angle)	11-11/16" (133° Angle)	2-1/4" (171° Angle)	4-9/16" (161° Angle)
15'	3-3/8" (165° Angle)	6-3/4" (149° Angle)		2-3/4" (167° Angle)	15'	3-7/8" (165° Angle)	7-13/16" (149° Angle)	1-1/2" (174° Angle)	3-1/16" (167° Angle)
20'	2-1/2" (169° Angle)	5-1/16" (157° Angle)		2-1/16" (171° Angle)	20'	2-15/16" (169° Angle)	5-7/8" (157° Angle)	1-1/8" (175° Angle)	2-3/4" (173° Angle)
25'	2" (171° Angle)	4-1/16" (162° Angle)		1-11/16" (172° Angle)	25'	2-5/16" (171° Angle)	4-11/16" (162° Angle)	15/16" (176° Angle)	1-13/16" (172° Angle)
30'	1-11/16" (172° Angle)	3-3/8" (165° Angle)		1-3/8" (174° Angle)	30'	1-15/16" (172° Angle)	3-7/8" (165° Angle)	3/4" (177° Angle)	1-1/2" (174° Angle)
40'	1-1/4" (174° Angle)	2-1/2" (169° Angle)		1-1/16" (175° Angle)	40'	1-7/16" (174° Angle)	2-15/16" (169° Angle)	9/16" (178° Angle)	1-1/8" (175° Angle)
50'	1" (175° Angle)	2" (171° Angle)		13/16" (176° Angle)	50'	1-3/16" (175° Angle)	2-5/16" (171° Angle)	7/16" (178° Angle)	15/16" (176° Angle)
60'	13/16" (176° Angle)	1-11/16" (172° Angle)		11/16" (177° Angle)	60'	1" (176° Angle)	1-15/16" (172° Angle)	3/8" (178° Angle)	3/4" (177° Angle)
70'	3/4" (177° Angle)	1-7/16" (173° Angle)		9/16" (177° Angle)	70'	13/16" (177° Angle)	1-11/16" (173° Angle)	5/16" (179° Angle)	5/8" (177° Angle)
80'	5/8" (177° Angle)	1-1/4" (174° Angle)		1/2" (178° Angle)	80'	3/4" (177° Angle)	1-7/16" (173° Angle)	5/16" (179° Angle)	9/16" (178° Angle)
90'	9/16" (177° Angle)	1-1/8" (175° Angle)		7/16" (178° Angle)	90'	5/8" (177° Angle)	1-5/16" (175° Angle)	1/4" (179° Angle)	1/2" (178° Angle)
100'	1/2" (178° Angle)	1" (175° Angle)		7/16" (178° Angle)	100'	9/16" (178° Angle)	1-3/16" (175° Angle)	1/4" (179° Angle)	7/16" (178° Angle)
120'	7/16" (178° Angle)	13/16" (176° Angle)		3/8" (178° Angle)	120'	1/2" (178° Angle)	1" (176° Angle)	3/16" (179° Angle)	3/8" (178° Angle)
140'	3/8" (178° Angle)	3/4" (177° Angle)		5/16" (179° Angle)	140'	7/16" (178° Angle)	13/16" (177° Angle)	3/16" (179° Angle)	5/16" (179° Angle)
160'	5/16" (179° Angle)	5/8" (177° Angle)		1/4" (179° Angle)	160'	3/8" (179° Angle)	3/4" (177° Angle)	1/8" (179° Angle)	5/16" (179° Angle)
180'	1/4" (179° Angle)	9/16" (177° Angle)		1/4" (179° Angle)	180'	5/16" (179° Angle)	5/8" (177° Angle)	1/8" (179° Angle)	1/4" (179° Angle)
200'	1/4" (179° Angle)	1/2" (178° Angle)		3/16" (179° Angle)	200'	5/16" (179° Angle)	9/16" (178° Angle)	1/8" (~180° Angle)	1/4" (179° Angle)

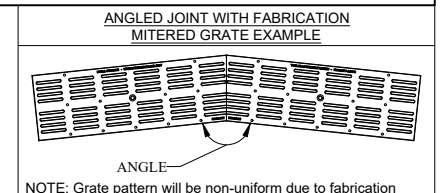
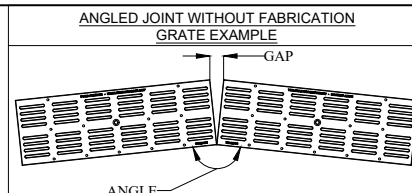
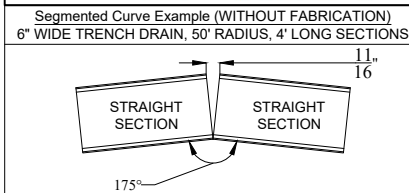
ADA / HEEL PROOF COMPLIANT AND NO FABRICATION REQUIRED

ADA COMPLIANT AND NO FABRICATION REQUIRED

TO MEET ADA OR HEEL PROOF COMPLIANCE FABRICATION REQUIRED

NOTES

1. ALL 4FT AND 8FT DATA BASED ON DURATRENCH CHANNELS
2. TABLE MEASUREMENTS DENOTE SPACE / GAP BETWEEN FRAMES ON OUTSIDE OF RADIUS AND ANGLE BETWEEN TRENCH SECTIONS SPECIFIED FOR EACH RADIUS / STRAIGHT SECTION LENGTH COMBINATION
3. SPACE / GAP BETWEEN FRAMES LIMITED TO 1/16" TOLERANCE & ANGLE TOLERANCE LIMITED TO 1 DEGREE
4. EVEN WHERE STRAIGHT SECTIONS ARE ACCEPTABLE; CERTAIN INSTALLATION CONDITIONS MAY REQUIRE TRUERADIUS TRENCH DRAIN FOR PROPER ALIGNMENT WITH CURBS, WALLS, AND OTHER FIXED FEATURES
5. ADA COMPLIANCE REQUIRES THAT SPACE BETWEEN GRATES NOT EXCEED 1/2", COLOR CODING ALLOWS FOR 3/8" SPACE BETWEEN FRAMES DUE TO 1/16" SPACING FROM END OF FRAME TO END OF GRATE
6. HEEL PROOF COMPLIANCE REQUIRES THAT SPACE BETWEEN GRATES NOT EXCEED 5/16", COLOR CODING ALLOWING FOR 3/16" SPACE BETWEEN FRAMES DUE TO 1/16" SPACING FROM END OF FRAME TO END OF GRATE

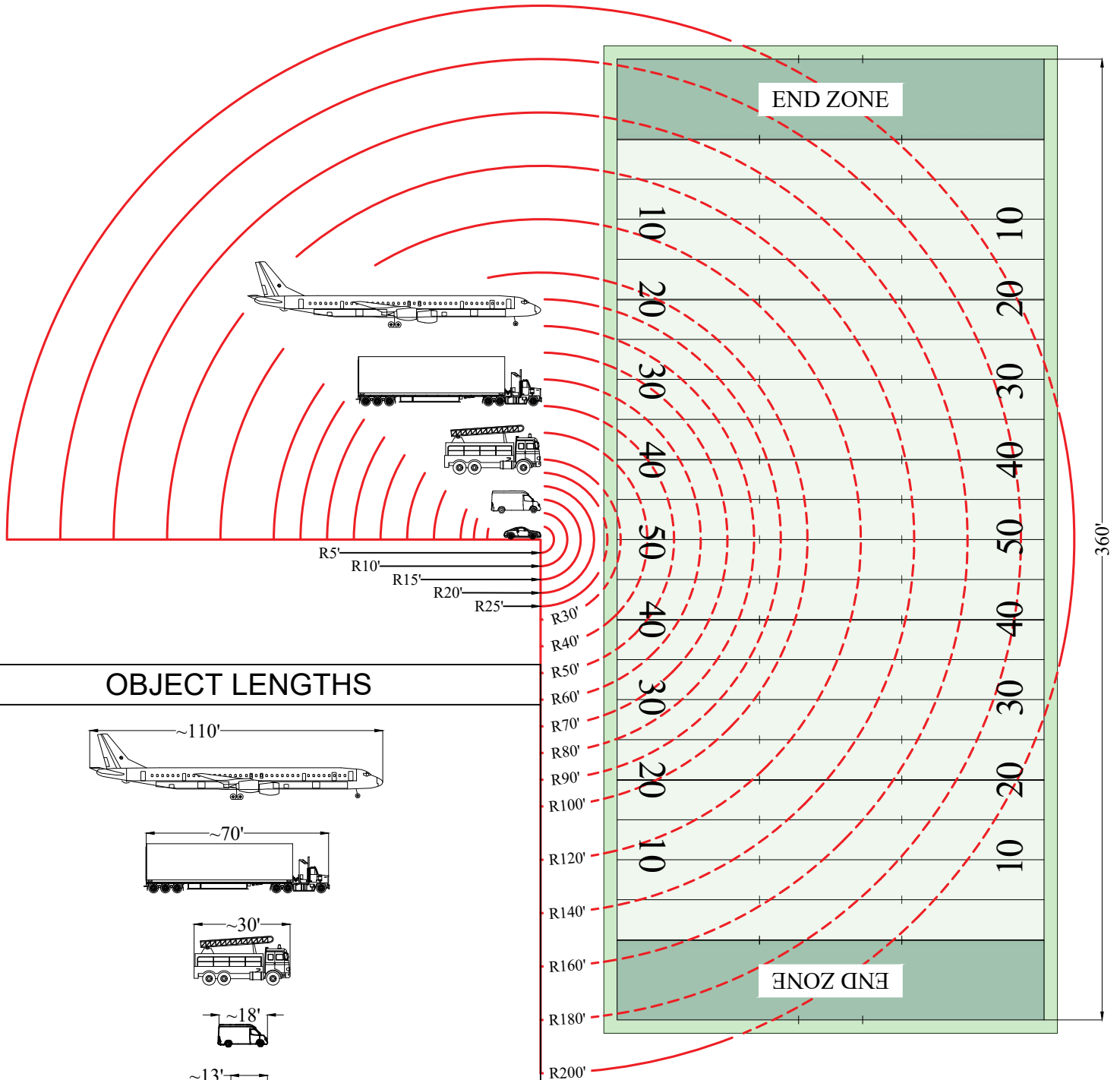




TrueRadius

FIG 2.0

RADIUS SIZE REFERENCE



To learn more about TrueRadius™ channel drains and other Dura Trench products, please visit our website or contact your local sales representative.

www.duratrench.com



Eric's
sons

MANUFACTURING

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