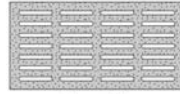


■ Note: When specifying/ordering grates, refer to "Choosing the Proper Inlet Grate" on pages 125-126.
 For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 327-332.

Narrow Slot Grates

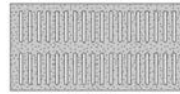
Castings available with Type Q Grates

Catalog No.	Outside Dimensions	Thickness
R-2015	22 3/4 dia.	1 3/4
R-2370	26 dia.	1 1/2
R-2750	31 7/8 dia.	1 3/8
R-1878-A1G	13 3/4 x 13 3/4	1 1/2
R-1878-A6G	25 3/4 x 25 3/4	1 1/2
R-1878-A9G	31 3/4 x 31 3/4	1 1/2
R-1881-H1	12 x 23 7/8	1 1/2
R-2569	16 x 16	1/2
R-3067	17 3/4 x 35 1/4	2
R-3437*	36 x 36	1 3/4
R-3540	31 3/4 x 33	3
R-3573-Q	26 1/2 x 23 13/16	2 1/2
R-3919	18 1/4 x 23 1/4	2 1/2
R-4441-1	12 x 12	1
R-4808-A	24 x 24	2
R-4859-Q	27 1/2 x 27 1/2	1
R-4990-CX	12 x 23 7/8	1 1/2
R-4990-DX	14 x 23 7/8	1 1/2
R-4990-HX	26 x 23 7/8	1 1/2
R-4996-A	8 x 29 7/8	1
R-4996-B	10 x 29 7/8	1
R-6133	25 dia.	1



Type Q

*Type Q Grates have a
3/8" to 1/2" slot width*



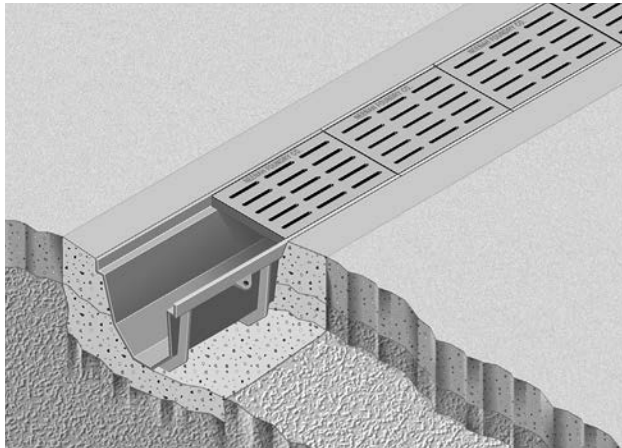
Type P

*Type P Grates have a
1/4" slot width*

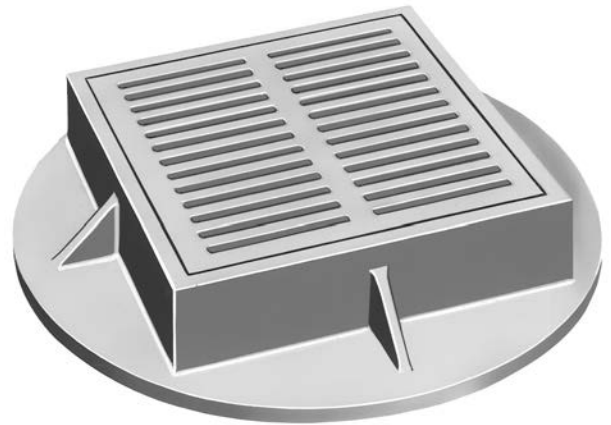
Castings available with Type P Grates

Catalog No.	Outside Dimensions	Thickness
R-3169	10 7/8 x 20	1 11/16
R-3205	17 x 22	1 3/4
R-4001-B	8 1/8 x 13 15/16	1
R-4015-A	9 x 11	1
R-4406-P	9 x 23 7/8	1 1/2
R-4430-1	11 x 23 7/8	1 1/8
R-4990-AX	8 x 23 7/8	1 1/2
R-4990-BX	10 x 23 7/8	1 1/2
R-4990-CX	12 x 23 7/8	1 1/2
R-4990-DX	14 x 23 7/8	1 1/2
R-4990-EX	17 x 23 7/8	1 1/2
R-4990-FX	20 x 23 7/8	1 1/2
R-4995-A1	11 1/2 x 23 7/8	3/4
R-4996-A1	11 1/2 x 23 7/8	1 1/2

*Grate furnished in two pieces



Illustrating R-4996-A trench with Type Q Grate



R-4990

HEAVY DUTY TRENCH

Materials: All frames and grates/lids are furnished standard in gray iron, meeting ASTM-A48 Class 35-B for heavy-duty use. For extra heavy-duty use or superior durability requirements, see our ductile iron Airport and Port Grating Series on page 286.

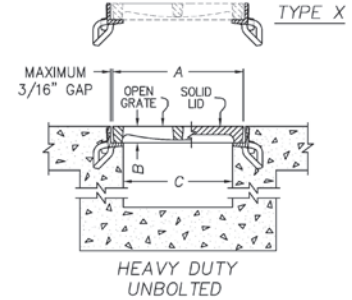
Neenah recommends project designers avoid the use of light duty trench installations because it is likely that applications will be subjected to heavy delivery vehicle traffic at some time. Furthermore, the use of a site could be changed to heavy duty use patterns at some unanticipated future date.

Dimensions in inches									
Un-Bolted Catalog No.	A	B	C	Type A	Type C	Type D	Type E	Type P	Type Q
R-4990-AX	8	1 1/2	6	x	x	x	x	x	
R-4990-BX	10	1 1/2	8	x	x	x	x	x	
R-4990-CX	12	1 1/2	10	x	x	x	x	x	x
R-4990-DX	14	1 1/2	12	x	x	x	x	x	x
R-4990-EX	17	1 1/2	15	x	x	x	x	x	
R-4990-FX	20	1 1/2	18	x	x	x	x	x	
R-4990-GX	23	1 1/2	21	x	x*	x			
R-4990-HX	26	1 1/2	24	x	x*	x	x		x
R-4990-JX	30	2	27	x	x	x			
R-4990-KX	33	2	30	x	x	x*	x		
R-4990-LX	36	2	33	x	x	x*			
R-4990-MX	39	2	36	x	x*	x			
R-4990-NX	45	2	42	x	x*	x			
R-4990-OX	51	2	48	x		x*			

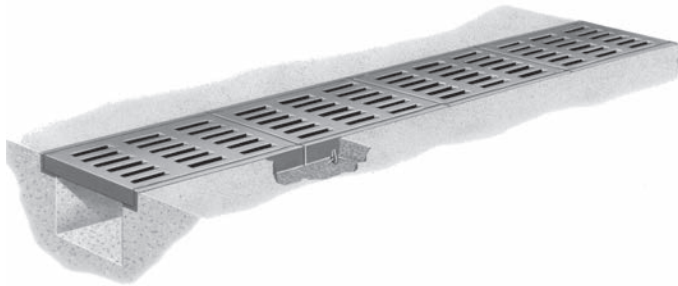
x - Indicates availability.

* Deep Ribs (consult shop drawing for dimensions).

Deep Ribs = "B" dimension times 2 or greater.



General schematic shown may not apply to all designs. Bar and rib depths, plate thicknesses and seating widths vary on different sizes and styles. If your project has design restrictions, contact your sales representative or product engineering.



Illustrating Type C trench. Trench sections are furnished in 24" standard lengths.

Note: In Type A and P grates the slots are perpendicular to the trench run. In Type C and Q grates the slots are parallel with the trench run.

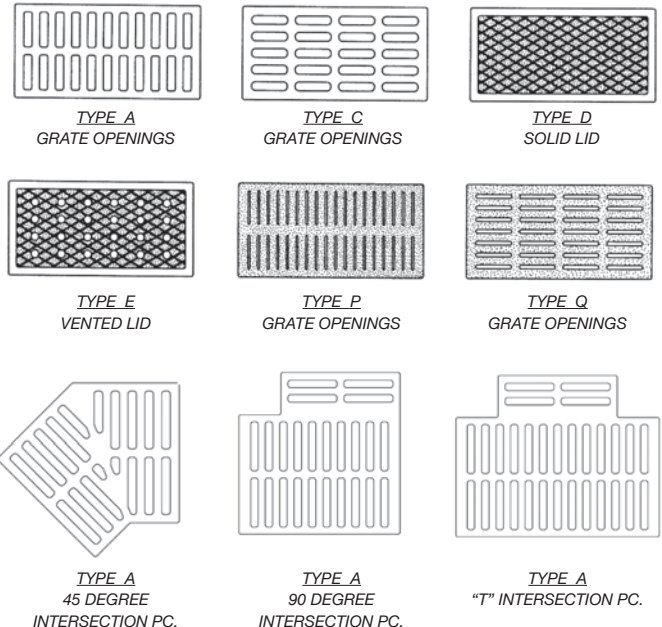
Read Carefully Before Ordering

The various standard trench drains are available with a number of alternatives. It is important to examine all of the variables carefully and specify your requirements fully. Your order will be entered correctly and promptly if it includes the following information:

- Complete catalog number
- Frame end pieces, when required
- Type of Lid or Grate: A, C, D, E, P or Q
- Length of trench sections
- Angles and intersections *
- Load requirements

*Trenches with angles, intersections, size changes or other special requirements require detail drawings prior to ordering. Contact your sales representative or product engineering for assistance.

800-558-5075



Note: 45°, 90° and "T" available in limited sizes and types.

FREE OPEN AREAS OF NEENAH GRATES (Continued)

CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET	CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET	CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET	CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET
R-4385-G	E	1.0	5.8	R-4585	A	1.9	9.1	R-4825-A	A	2.1	9.0	R-4977-1	B	1.5	4.0
R-4385-H	G	1.6	7.6	R-4586	A	1.5	8.6	R-4825-B	C	2.0	9.0	R-4977-2	A	2.0	5.0
R-4385-J	G	2.5	8.6	R-4600	A	0.9	6.5	R-4826	A	1.3	8.0	R-4977-2	B	2.0	5.0
R-4385-K	G	2.7	9.4	R-4603-A	A	0.8	6.7	R-4828	A	1.9	9.5	R-4977-3	A	3.7	10.0
R-4389-O	B	0.2	3.0	R-4604	C	1.3	6.7	R-4829	C	2.2	9.5	R-4977-3	B	3.7	10.0
R-4390	B	0.3	5.0	R-4604-C	A	0.7	6.7	R-4832	C	1.5	8.0	R-4977-4	A	5.3	12.0
R-4400-A	A	0.1	2.7	R-4604-D	A	1.5	6.7	R-4832-B	C	1.8	8.7	R-4977-4	B	5.3	12.0
R-4401	A	0.1	2.7	R-4608	A	0.8	6.0	R-4833	A	2.3	8.7	R-4977-5	A	8.0	15.0
R-4403	A	0.3	3.7	R-4610	A	1.0	6.4	R-4837	A	2.2	9.8	R-4977-5	B	8.0	15.0
R-4404-C	B	0.5	5.3	R-4620	A	0.8	6.0	R-4839	A	2.1	9.9	R-4990-AA	A	0.2	2.0
R-4406	B	0.5	5.3	R-4630	C	0.9	6.2	R-4840	C	2.8	10.0	R-4990-AX	A	0.2	2.0
R-4406-C	A	0.4	5.5	R-4632	C	1.1	6.3	R-4843	A	2.6	10.0		C	0.3	2.0
R-4406-P	P	0.1	5.5	R-4640	A	1.3	6.4	R-4850	C	2.7	9.0		P	0.1	2.0
R-4406-1	A	0.5	5.3	R-4641	A	1.1	6.8	R-4852	C	2.0	9.0	R-4990-BA	A	0.3	2.0
R-4406-2	C	0.6	5.3	R-4641-A	A	1.2	6.8	R-4852-A	Q	1.8	9.0	R-4990-BX	A	0.3	2.0
R-4407-2A	B	0.6	5.6	R-4641-C	C	1.1	6.8	R-4853	A	2.5	10.5		C	0.3	2.0
R-4408	B	0.3	3.4	R-4641-F	A	1.8	8.5	R-4853-A	A	3.1	11.5		P	0.1	2.0
R-4409	A	0.4	4.6	R-4649	A	1.1	6.9	R-4853-B1	C	3.3	12.5	R-4990-CA	A	0.4	2.0
R-4409-A	C	0.7	5.7	R-4652	A	1.5	7.9	R-4855	A	2.0	9.3	R-4990-CX	A	0.4	2.0
R-4409-C	B	0.5	5.7	R-4660	C	1.1	6.0	R-4856	C	3.1	9.7		C	0.4	2.0
R-4409-E	A	0.5	5.7	R-4662	A	1.3	6.6	R-4857	A	3.1	12.3		P	0.1	2.0
R-4409-G	B	0.8	5.7	R-4670-A	A	1.1	7.0	R-4859-C	A	2.4	9.1		Q	0.1	2.0
R-4421	C	1.0	8.3	R-4671	A	1.1	7.0	R-4859-C	C	2.3	9.1	R-4990-DA	A	0.4	2.0
R-4423-A	A	1.2	9.7	R-4672	C	1.1	7.0	R-4859-Q	Q	0.9	9.1		C	0.4	2.0
R-4424	H	0.6	5.6	R-4689	C	1.4	7.5	R-4859-S	S	2.0	9.1	R-4990-DX	A	0.4	2.0
R-4430-1	P	0.2	5.8	R-4692-A	D	2.0	8.7	R-4871	B	2.7	9.2		C	0.5	2.0
R-4430-A	A	0.6	6.0	R-4698	A	1.7	9.0	R-4880	C	2.5	9.3		P	0.2	2.0
R-4430-B	C	0.7	5.9	R-4710	C	1.5	9.0	R-4880-C	C	2.2	10.0		Q	0.2	2.0
R-4435-1	C	0.8	4.3	R-4711	C	1.1	9.5	R-4882	A	4.0	11.3	R-4990-EA	A	0.5	2.0
R-4441-1	Q	0.2	4.0	R-4718	A	2.7	9.3	R-4882-A	A	2.8	11.3	R-4990-EX	A	0.6	2.0
R-4443	A	0.4	4.3	R-4720	C	0.9	6.7	R-4884-A	C	3.3	6.0		C	0.5	2.0
R-4449	A	0.8	6.0	R-4721-A	A	1.2	7.0	R-4890	C	3.4	10.8		P	0.2	2.0
R-4450	A	0.8	6.0	R-4725	H	1.6	7.0	R-4891	A	3.5	13.0	R-4990-FA	A	0.6	2.0
R-4450-A	A	0.6	6.0	R-4730	A	2.0	8.6	R-4893	C	6.0	18.0	R-4990-FX	A	0.7	2.0
R-4451	C	0.7	6.0	R-4731	A	2.5	9.8	R-4893-B	C	1.9	11.0		C	0.8	2.0
R-4454	C	0.9	6.3	R-4732	A	2.0	9.8	R-4894	C	3.3	11.5		P	0.5	2.0
R-4460	A	0.8	7.0	R-4735	A	1.2	7.3	R-4895-2	A	6.6	17.0	R-4990-GX	A	0.8	2.0
R-4462	B	0.9	7.8	R-4736	C	1.1	7.3	R-4937-A	B	0.2	2.7		C	0.7	2.0
R-4470	A	1.5	10.0	R-4738	A	1.1	7.3	R-4937-B	G	0.1	2.2	R-4990-HA	A	0.9	2.0
R-4511	A	0.5	4.7	R-4739	C	1.3	7.3	R-4937-C1	H	0.2	4.0	R-4990-HX	A	0.9	2.0
R-4523	A	0.9	6.3	R-4740	C	2.1	8.0	R-4937-C2	H	0.2	4.0		C	0.9	2.0
R-4525	A	0.8	6.3	R-4750	C	2.4	8.3	R-4937-C3	H	0.2	4.0		Q	0.5	2.0
R-4530	A	0.8	6.1	R-4750-1	A	2.8	11.3	R-4938	A	0.8	6.9	R-4990-JX	A	1.0	2.0
R-4531	A	0.8	6.4	R-4751	C	1.9	7.9	R-4938-B	A	0.2	3.2		C	1.1	2.0
R-4540	C	1.0	6.8	R-4752	C	2.3	9.4	R-4941-A	B	0.4	4.7	R-4990-KA2	A	0.5	2.0
R-4541	A	1.0	7.1	R-4755-B	A	2.8	10.5	R-4941-B	B	0.4	4.7	R-4990-KX	A	1.2	2.0
R-4544	A	1.8	8.7	R-4755-C	C	2.9	10.5	R-4942-A	A	0.7	6.5		C	0.9	2.0
R-4545	A	1.8	10.4	R-4759	C	1.5	7.5	R-4943	K	0.3	5.4	R-4990-LX	A	1.2	2.0
R-4548	H	1.0	5.9	R-4760	C	1.7	7.3	R-4943-A	K	0.3	5.4		C	1.2	2.0
R-4550	H	0.8	5.0	R-4762	C	2.4	8.7	R-4943-B	K	0.3	5.4	R-4990-MX	A	1.4	2.0
R-4552	A	0.6	5.3	R-4765	A	1.4	7.7	R-4976-1	A	0.9	3.1		C	1.2	2.0
R-4557	A	0.8	5.3	R-4780	C	3.1	9.8	R-4976-1	B	0.9	3.1	R-4990-NX	A	1.4	2.0
R-4558	C	1.1	5.9	R-4781	C	3.0	11.7	R-4976-2	A	1.5	4.2		C	1.6	2.0
R-4570-1	A	0.9	6.3	R-4795	A	3.2	11.3	R-4976-2	B	1.5	4.2	R-4990-OA	A	1.3	2.0
R-4570-2	A	0.9	6.5	R-4798	C	2.4	9.9	R-4976-3	A	2.5	5.2	R-4990-OX	A	1.6	2.0
R-4573	A	1.1	7.5	R-4808-A	Q	0.8	8.0	R-4976-3	B	2.5	5.2		C	NA	2.0
R-4575-A	A	1.7	8.5	R-4810	C	1.5	8.0	R-4976-4	A	3.7	6.3	R-4993-AB	A	0.2	2.0
R-4579	A	0.8	6.4	R-4820	C	1.5	8.0	R-4976-4	B	3.7	6.3		C	0.3	2.0
R-4583	A	0.9	6.3	R-4821-A	C	1.7	8.3	R-4976-5	B	5.2	8.1		P	0.1	2.0
R-4584	A	1.3	4.3	R-4825	C	1.8	9.0	R-4977-1	A	1.5	4.0	R-4993-AAB	A	0.2	2.0

• NOTE: On catalog #'s R-4990-AA thru R-4999-L9, SQ.FT. OPEN and WEIR PERIMETER are per lineal foot. Type K indicates "Special" grate style and is not among standard types illustrated.
 ** Roll-type or mountable curb