



R-4999 Vaned Type L Series
BOLTED TRANSVERSE DRAINAGE STRUCTURE

Heavy Duty

This trench grate series represents Neenah's best hydraulic performance.

Catalog No.	A	B	C
R-4999-L3**	12	1 1/2	10
R-4999-L3**	23 7/8	2	21 7/8
R-4999-L3**	28 5/8	2	24 5/8
R-4999-L3**	29 3/4	2 1/2	26 3/4

* Furnished in 24" sections.
** Furnished in 18" or 36" sections.
*** Furnished in 18" or 36" sections.

Type L vane shaped grates have the ability to remove significant amounts of sheet flow from streets, parking lots and industrial lots. For detailed hydraulic information, visit our website at www.neenahfoundry.com and select "Hydraulic Calculator" or contact Neenah Product Engineering.

See R-4994 trench forming instructions on page 205.

R-4999

Suggested Forming Instructions for R-4999 Frame and Grate/Lid

Bolted Units
Bolted frames and grates are furnished assembled and, therefore, require different forming procedures from unbolted units. Do check that the 3/16" maximum gap has not changed in transport. Details and suggestions are based on the Neenah Foundry Type B Frame.

Forming Procedures
Pour the floor slab of the trench according to the plans and specifications. The width of the forming, (see Figure 1) measured from the outside edges of the forms, corresponds to the "C" dimension on Figure 2. During the entire forming procedure, verify that the forms are plumb, straight, solid and level.

The rebar shown in the vertical walls of the trench is for illustrative purposes only. Proper sizing and placement is the responsibility of the engineering firm providing the project design.

General Comments
All frame sections are manufactured and furnished in standard 24" lengths. It is the responsibility of the installer to cut frame pieces to the proper length and miter corners where applicable. In cases where trench direction must change, special drawings will be furnished by our engineering services department. These prints will show special lengths and cuts of grates/lids and other essential information.

PROJECT TITLE:
Construction Plans for
Tyke Town Development Centers
8368 Mexico Road
St. Peters, MO 63376

ENGINEERING
PLANNING
SURVEYING

221 Point West Blvd.
St. Charles, MO 63301
636-462-5582
FAX 636-462-1718

DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

REVISIONS

NO.	DATE	DESCRIPTION
04-16-18		CITY COMMENTS
05-03-18		REV. BASIN DETAILS
05-07-18		CITY COMMENTS

Developer / Owner:
Tyke Town Properties, LLC
P.O. Box 81
Troy, Missouri 63379
636-462-5380

CONSTRUCTION DETAILS

P+Z No. 17-012955
Approval Date: 02-01-18
City No. #
Page No. 14 of 15

ENGINEER SEAL DOES NOT APPLY TO NYLOPLAST AND NEENAH DETAILS