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Kenko Inc

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Trench Shield #42 Used at Ritchie Bros. 2004 Auction

P. 05



LITTLE ROCK

25/21

1360 Livingstone Road, Hudson, Wisconsin 54016 (715) 386-2930 ◆ Toll Free: 1-800-242-2930 ◆ Fax: (715) 386-5189

NACUTACTURERS TABULATED DATA

SPECIFICATIONS:

46-416A

MOULL:

543 - 416

SERIAL NUMBER:

92-82

HEIGHT:

4 FEET

LENGTH:

16 FLET

KATED UNIFORM PRESSURE:

529 PSF

BOTTOM PRESSURE IN C LOADING:

689 PSP.

MAXIMUM DEPTH OF TRENCH:

GRADIENT STRAIGHT TRENCH TYPE A LOADS: 25 PSF/FT SLOPED TRENCH 20.3 FEET TYPE B LOADS: 45 PSF/FT 20.0 FERT 12.2 FEET TYPE C LOADS: 80 PSF/FT 20.0 FFET 7.7 FEET TYPE C LOADS: 60 PSF/FT 20.0 FEET

PEFLECTION AT MACINE LOADING:

2.06 INCH

NOTE: STRAIGHT THENCH MAY REQUIRE STACKING ADDITIONAL SHIELDS ABOVE THIS SHIELD. SLOPING APPLCATIONS REQUIRE 18" FREEBOARD AND SLOPES PER OSHA MSCFR1926 TABLE B-1. SOIL TYPES SHALL BE AS DETERMINED BY A COMPETENT PERSON. ALL SLOPING TRENCHES GREATER THAN 20 FEET IN DEPTH MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENG. NEER. THE SHIELD MAY BE USED FOR INSTALLATIONS AND UNDER COMDIT: BYS OTHER THAN THOSE STATED HEREIN IF A REGISTERED PROFESSIONAL ENG. NEER HAS DESIGNED SUCH ALTERNATE. DETAILED CALGULATIONS FOR THE DESIGN OF THIS SHIELD ARE ON FILE AT THE OFFICE OF THE MAY UFACTURER.

10.8 FEET

RECOMPLEMENTIONS:

THIS TRENCH SHIELD IS INTENDED TO BE USED FOR PERSONNEL PROTECTION SYSTEMS IN ENGANATIONS. THE SHIELD SHALL NOT BE USER IF IT IS STRUCTURALLY DAMAGED. DAMAGE TO THE SHIELD HAY RESULT FROM PUNCTURING THE SAME OR DRIVING THE SHIELD INTO THE SOIL.

CERTIFICATION:

I HEREBY CERTIFY FIRST THIS DESIGN WAS PREFARED UNDER MY SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

REGISTRATION # 7010

ROW 6

SERIAL NUMBER;

46-4161

KENKO, INC.

1025 Calimesa Blvd Calimesa, CA 92320

4X16A

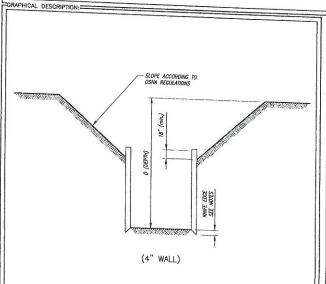
05/30/03

DATE ISSUED:

USE NOTES:

- TRENCH SHIELD TO BE ASSEMBLED AND INSTALLED AS SHOWN AND IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- BANK ABOVE TOP OF SHILED TO BE LAID BACK ACCORDING TO OSHA REGULATIONS.
- SOILS YIELDING LATERAL EARTH PRESSURES EXCEEDING THOSE TABULATED REQUIRE VERIFICATION BY A REGISTERED PROFESSIONAL ENGINEER.
- CONSULT MANUFACTURER WHEN BOTTOM OF SHIELD IS NOT AT TRENCH BOTTOM.
- KNIFE EDGE EMBEDMENT REQUIRED WHEN SUPPLIED UNLESS NOTED OTHERWISE.
- KNIFE EDGE EMBEDMENT REQUIRED FOR ALL SHIELD DESIGNS WITH HYDROSTATIC PRESSURE.
- IF DEWATERING WITH WELLS OR WELL POINTS AND WATER TABLE IS AT OR BELOW TRENCH BOTTOM ADJUST SOILS CLASSIFICATION.

- ADDITIONAL SHIELDS MAY BE STACKED WITH NO PENALTY IN DEPTH
- DEPTHS OF CUTS SHOWN ARE BASED ON EXAMPLES OF VARIOUS SOIL CONDITIONS. VERIFY ACTUAL SOIL PRESSURES PRIOR TO
- ANY MODIFICATIONS OR ALTERATIONS NOT ALLOWED UNLESS APPROVED IN WRITING BY MANUFACTURER OR REGISTERED PROFESSIONAL
- THIS TRENCH SHIELD IS INTENDED TO BE USED FOR PERSONNEL PROTECTION SYSTEMS IN EXCAVATIONS. THE SHIELD SHALL NOT BE USED IF IT IS STRUCTURALLY DAMAGED.



SHEET TITLE:

RATING INFORMATION:

SHIELD SIZE			
HEIGHT (FEET)	LENGTH (FEET)	MAX. LATERAL EA PRESSURE CAPA AT TRENCH BOTT (PSF)	

16

600

MAXIMUM ALLOWABLE DEPTH OF CUT (D) (FEET)

SOIL TY	PE TO BE EX	CAVATED
TYPE A MOIST SOIL 25 PSF PER FOOT OF DEPTH	TYPE B WET MUCKY SOIL 45 PSF PER FOOT OF DEPTH	TYPE C HYDROSTATIC PRESSURE— SUBMERCED SOIL 80 PSF PER FOOT OF DEPTH
24.0	13.0	7.5
DESCRIPTION MOIST FINE SAND, SAND-GRAVEL OR CANT SOLES WITH LOT PRESSURE NOT EXCEDING 25 PSF PER FOOT OF DEPTH	DESCRIPTION WET MUCKY CLAY- SILT SOILS WITH LIQUID PRESSURE NOT EXCEEDING 45 PSF PER FOOT OF DEPTH	DESCRIPTION SATURATED MUCK, SILT, SAND-CRAVEL OR CLAY SOILS HITH LIQUID PRESS. NOT EXCEEDING 80 PSF PER FOOT OF DEPTH

PREPARED BY

SAINT PAUL, MINNESOTA 55/01-1975
PHONE: (651) 209-1167 FAIC (651) 209-1168

WWW.projecteng.com

TRENCH SHIELD CERTIFICATION

LICENSURE: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 05/30/03 REG. NO. _ 25113