FIRES
The Experts on Fire Safety

FUNCTION IN FIRE EXPERT JUDGEMENT REPORT WITH CLASSIFICATION IN ACCORDANCE WITH DIN 4102-12: 1998-11

FIRES-JR-074-22-NURE

Name of the product: Cable bearing system VERGOKAN with cables DÄTWYLER and Prysmian

Sponsor:
VERGOKAN
Meersbloem Melden 16
9700 Oudenaarde
Belgium

Prepared by:
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Notified Body No. 1396, Approved Body No. SK01, Member of EGOLF

1. INTRODUCTION

This expert judgement report with classification defines the function in fire classification assigned to element „Cable bearing system VERGOKAN with cables DÄTWYLER and Prysmian" in accordance with the classes given in DIN 4102-12: 1998-11.

Test of function in fire was carried out according to standard STN 92 0205. Similar standards for tests of function in fire is DIN 4102-12: 1998-11.

Deviations from standard at the test according to DIN 4102-12: 1998-11: This test was carried out according to standard STN 92 0205: 2012 and meets requirements of DIN 4102-12: 1998-11. Basic deviation in process and carrying out of test between these standards is in measuring and in control of temperature in the test furnace. According to STN 92 0205: 2012, plate thermometers according to EN 1363-1: 1999 are used. According to DIN 4102-12: 1998-11, common thermocouples of construction which was used for this measurement till issue of EN 1363-1:1999 are used. Measurement by plate thermometers acc. to EN 1363-1: 1999 can be considered as stricter method of temperature control in test furnace in compare with thermocouples used till issue of EN 1393-1: 1999. Therefore, it is possible to use results of test according to STN 92 025: 2012 for classification of tested cables according to DIN 4102-12: 1998-11, but not conversely. Identified deviation results in stricter course of test and it can lead to reduced classification of tested cables what is accepted as enhanced security in practice.

This expert judgement report defines field of application which is outside the field of direct application according test standard. This expert judgement expresses the opinion of the FIRES and is based on the experience or internal rules of FIRES.

This product has already been classified by FIRES, s.r.o. and number of previous fire resistance expert judgement report with classification is FIRES-JR-057-16-NURE (issued on 14. 06. 2016) with validity until 14. 06. 2021. Document FIRES-JR-074-22-NURE replaces expert judgement report with classification FIRES-JR-057-16-NURE.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The element, cable bearing system VERGOKAN with cables DÄTWYLER and Prysmian, is defined as a cable bearing system for power and communication halogen free cables with circuit integrity maintenance in fire.

2.2 PRODUCT DESCRIPTION

Cable trays KBSI
Cable trays are made of steel sheet 0,75 mm thick. Height of side wall is 60 mm. Width of tray is 300 mm. The trays are perforated on the sides and on the bottom. Cable tray is equipped with integrated junction. Trays are jointed together with 5 pcs of screws VMK 6x10 (new trademark is VMK6.10). Maximum load of trays is 20 kg.m^{-1}. Tested trays were KBSI 60x300x0,75 (new trademark is KBSI60.300.075).

Brackets WKM
Brackets are made of steel sheet 2,5 mm thick. Dimensions of the base steel sheet is (70x175) mm and 8,0 mm thick and is equipped by holes for installation. Holes for installation of trays are in upper part of the brackets.
Tested brackets were WKM 300 (new trademark is HDWKM300).

Consoles HSMU
Consoles are made from steel sheet and are composed of a head plate and the U 50 profile. Dimensions of the base head is (123x123) mm and 4,0 mm thick or (135x135) mm and 5,0 mm thick and is equipped by holes for installation. Dimensions of the U profile is (50x50) mm and 2,5 mm thick and is equipped by holes for installation of brackets. Tested consoles were HSMU 50x1000 (new trademark is HDHSMU50.1000).

SPACER TSU50 and HDTSU50
Spacers are made of steel sheet 1,0 mm thick (TSU50) or 1,5 mm thick (HDTSU50).

Cables

Power and communication free halogen cables are specified for stationary distribution of electrical energy in dry and damp premises. Since they are free from halogens and exhibit enhanced fire performance, these cables are used in those applications where in the event of fire, the negative effect on concentrations of people and valuable material goods must be minimized. Suitable for hotels, hospitals, underground railways, airport etc. to protect people and technical building equipment in the event of fire where there is requirement for maintaining the functional integrity all cable installation in the event of fire. The cables develop in case of fire low heat released rate and smoke and no burning particles drop away during fire accident. Functional integrity all cable installation in the event of fire is guaranteed only with use specified supporting member and cables grips.

Used cables by test

DÄTWYLER cables (producer Dätwyler AG, Gotthardstrasse 31, CH-6460 Altdorf, Switzerland):

- cable (N)HXH FE180 E30-E60 4x50 RM (2x);
- cable (N)HXH FE180 E30-E60 4x1,5 RE (2x);
- cable (N)HXCH FE180 E30-E60 4x50 RM/25 (2x);
- cable (N)HXCH FE180 E30-E60 4x1,5 RE/1,5 (2x);
- cable (N)HXH FE180 E90 4x50 RM (2x);
- cable (N)HXH FE180 E90 4x1,5 RE (2x);
- cable (N)HXCH FE180 E90 4x50 RM/25 (2x);
- cable (N)HXCH FE180 E90 4x2,5 RE/2,5 (2x);
- cable JE-H(St)H...Bd FE180 E30-E90 2x2x0,8 (2x);
- cable JE-H(St)HRH...Bd FE180 E30-E90 2x2x0,8 (2x).

Prysmian cables (producer Prysmian, Viale Sarca 222, IT-20126 Milano, Italy):

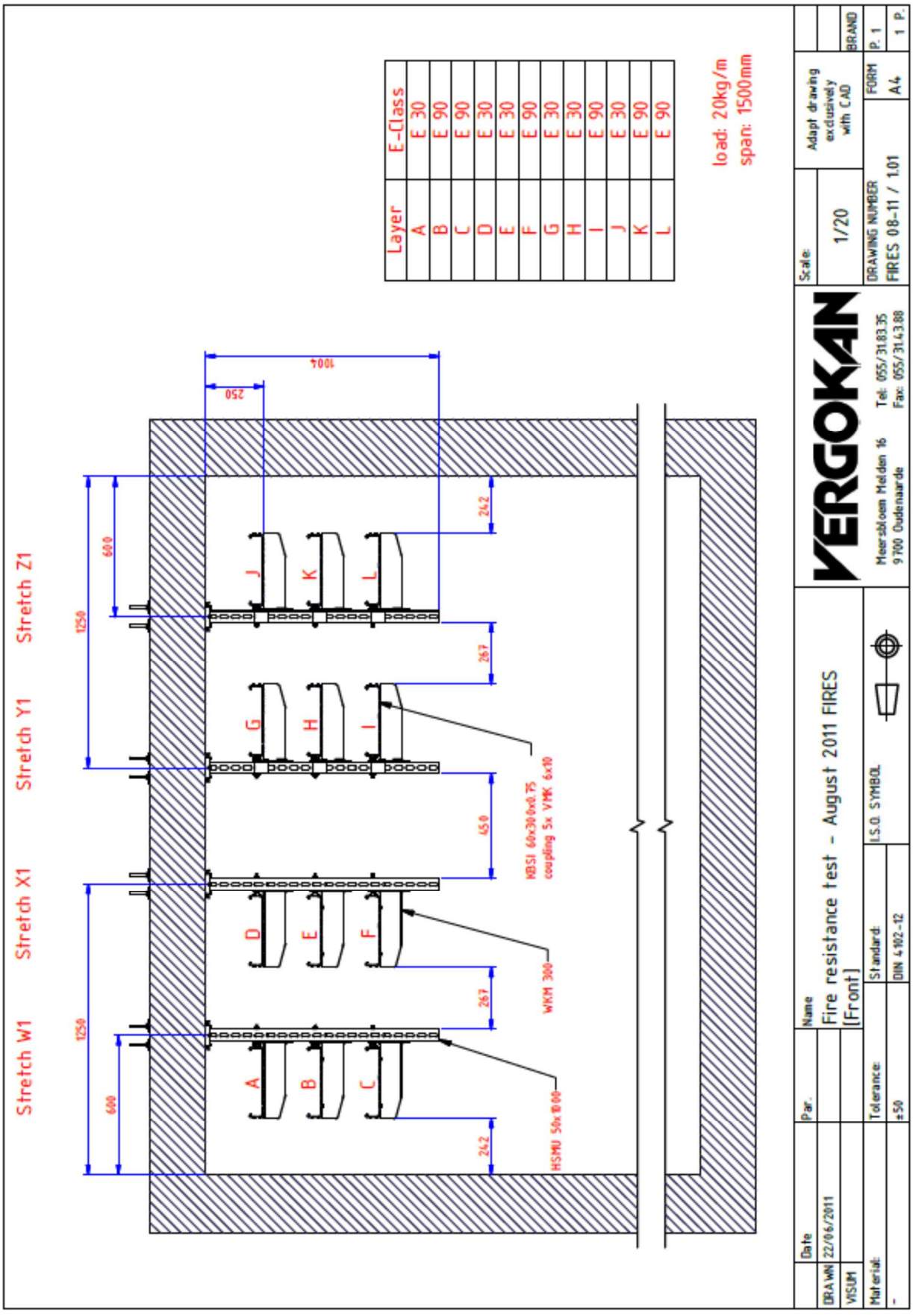
- cable (N)HXH-J E30 4x50 RM (2x);
- cable (N)HXH-J E30 4x1,5 R (2x);
- cable (N)HXCH E30 4x50 RM/25 (2x);
- cable (N)HXCH E30 4x1,5 RE/1,5 (2x);
- cable (N)HXHX-J E90 4x50 RM (2x);
- cable (N)HXHX-J E90 4x1,5 RE (2x);
- cable (N)HXCHX E90 4x50 RM/25 (2x);
- cable (N)HXCHX E90 4x2,5 RE/2,5 (2x);
- cable JE-H(St)H E30 2x2x0,8 (2x).

The length of cables was 5,5 m and 4,0 m from that was exposed to fire.

Power and communication cables were fixed to the steel sheet trays in the points of allowed bending radius by steel clamps according to the cable diameter.

More detailed information about product construction is shown in the drawings which form an integral part of test report [1]. Drawings were delivered by sponsor.

Assembly of the tested structure, more information in the test report [1].



3. TEST REPORTS AND EXTENDED APPLICATION REPORTS IN SUPPORT OF CLASSIFICATION

3.1 TEST REPORTS AND EXTENDED APPLICATION REPORTS

No.	Name of laboratory	Name of sponsors	Test report No.	Date of the test	Test method
[1]	FIRES, s.r.o., Batizovce, Slovak Republic	VERGOKAN, Oudenaarde, Belgium	FIRES-FR-171-11-AUNE	17. 08. 2011	STN 92 0205

3.2 TEST RESULTS

Test report No. /Test method	Specimen No.	Cables	Producer	Track No.	Time to first failure / interruption of conductor
[1] STN 92 0205	S1	cable (N)HXCH FE180 E30-E60 4x50 RM/25	DÄTWYLER	W1 - A	93 minutes no failure / interruption
	S2	cable (N)HXCH FE180 E30-E60 4x50 RM/25	DÄTWYLER	W1 - A	92 minutes
	S3	cable (N)HXCH FE180 E90 4x50 RM/25	DÄTWYLER	W1 - B	93 minutes no failure / interruption
	S4	cable (N)HXCH FE180 E90 4x50 RM/25	DÄTWYLER	W1 - B	93 minutes no failure / interruption
	S5	cable (N)HXH FE180 E90 4x50 RM	DÄTWYLER	W1 - C	93 minutes no failure / interruption
	S6	cable (N)HXH FE180 E90 4x50 RM	DÄTWYLER	W1 - C	93 minutes no failure / interruption
	S7	cable (N)HXH FE180 E30-E60 4x50 RM	DÄTWYLER	X1 - D	87 minutes
	S8	cable (N)HXH FE180 E30-E60 4x50 RM	DÄTWYLER	X1 - D	74 minutes
	S9	cable (N)HXCH FE180 E30-E60 4x1,5 RE/1,5	DÄTWYLER	X1 - E	93 minutes no failure / interruption
	S10	cable (N)HXCH FE180 E30-E60 4x1,5 RE/1,5	DÄTWYLER	X1 - E	93 minutes no failure / interruption
	S11	cable (N)HXH FE180 E30-E60 4x1,5 RE	DÄTWYLER	X1 - E	93 minutes no failure / interruption
	S12	cable (N)HXH FE180 E30-E60 4x1,5 RE	DÄTWYLER	X1 - E	93 minutes no failure / interruption
	S13	cable (N)HXCH FE180 E90 4x2,5 RE/2,5	DÄTWYLER	X1 - F	93 minutes no failure / interruption
	S14	cable (N)HXCH FE180 E90 4x2,5 RE/2,5	DÄTWYLER	X1 - F	93 minutes no failure / interruption
	S15	cable (N)HXH FE180 E90 4x1,5 RE	DÄTWYLER	X1 - F	93 minutes no failure / interruption
	S16	cable (N)HXH FE180 E90 4x1,5 RE	DÄTWYLER	X1 - F	93 minutes no failure / interruption
	S17	cable (N)HXH-J E30 4x50 RM	Prysmian	Y1 - G	83 minutes
	S18	cable (N)HXH-J E30 4x50 RM	Prysmian	Y1 - G	91 minutes
	S19	cable (N)HXH-J E30 4x1,5 RE	Prysmian	Y1 - H	73 minutes
	S20	cable (N)HXH-J E30 4x1,5 RE	Prysmian	Y1 - H	84 minutes
	S21	cable (N)HXCH E30 4x1,5 RE/1,5	Prysmian	Y1 - H	87 minutes
	S22	cable (N)HXCH E30 4x1,5 RE/1,5	Prysmian	Y1 - H	81 minutes
	S23	cable (N)HXHX-J E90 4x1,5 RE	Prysmian	Y1 - I	93 minutes no failure / interruption
	S24	cable (N)HXHX-J E90 4x1,5 RE	Prysmian	Y1 - I	93 minutes no failure / interruption
	S25	cable (N)HXCHX E90 4x2,5 RE/2,5	Prysmian	Y1 - I	93 minutes no failure / interruption
	S26	cable (N)HXCHX E90 4x2,5 RE/2,5	Prysmian	Y1 - I	93 minutes no failure / interruption
	S27	cable (N)HXCH E30 4x50 RM/25	Prysmian	Z1 - J	78 minutes
	S28	cable (N)HXCH E30 4x50 RM/25	Prysmian	Z1 - J	90 minutes
	S29	cable (N)HXHX-J E90 4x50 RM	Prysmian	Z1 - K	93 minutes no failure / interruption
	S30	cable (N)HXHX-J E90 4x50 RM	Prysmian	Z1 - K	69 minutes
	S31	cable (N)HXCHX E90 4x50 RM/25	Prysmian	Z1 - L	93 minutes no failure / interruption
	S32	cable (N)HXCHX E90 4x50 RM/25	Prysmian	Z1 - L	93 minutes no failure / interruption
	S52	cable JE-H(St)HRH...Bd FE180 E30-E90 2x2x0,8	DÄTWYLER	W1 - A	29 minutes
	S53	cable JE-H(St)HRH...Bd FE180 E30-E90 2x2x0,8	DÄTWYLER	W1 - B	25 minutes
	S54	cable JE-H(St)H...Bd FE180 E30-E90 2x2x0,8	DÄTWYLER	W1 - C	25 minutes
	S55	cable JE-H(St)H...Bd FE180 E30-E90 2x2x0,8	DÄTWYLER	X1 - D	33 minutes
	S56	cable JE-H(St)H E30 2x2x0,8	Prysmian	Y1 - G	61 minutes
	S57	cable JE-H(St)H E30 2x2x0,8	Prysmian	Z1 - J	66 minutes

[1] The fire test was discontinued in 94th minute at the request of test sponsor.

Specimens S1 – S32 were tested by three-phase voltage supply 3 x 230/400V with bulbs 240V / 60 W.
Specimens S52 – S57 were tested by one-phase voltage supply 1 x 110V with LED diodes 3V /0,03W.

Circuit breakers with rating 3 A and performance characteristics B(gL) were used.

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1 CLASSIFICATION ACCORDING TO DIN 4102-12: 1998-11

The element, cable bearing system VERGOKAN – cable trays with accessories (consoles, brackets, screws etc.) with power and communication halogen free cables DÄTWYLER and Prysmian with circuit integrity maintenance in fire, is classified according to the following combinations of performance parameters and classes as appropriate.

Used cables DÄTWYLER by test are classified as follows:

Type of cable	**Type of tested cable, single cross-sections and number of conductors**	**Arrangement**	**Classification for type of tested cable** (by cross-sections and number of conductors)	**Classification for type of cable**
(N)HXH FE180 E30-E60	(N)HXH FE180 E30-E60 4x1,5 RE	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track X1-D and X1-E.	**E 90**	n x ≥ 1,5 mm^2 n ≥ 1 **E 60**
	(N)HXH FE180 E30-E60 4x50 RM		**E 60**	
(N)HXCH FE180 E30-E60	(N)HXCH FE180 E30-E60 4x1,5 RE/1,5	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track W1-A and X1-E.	**E 90**	n x ≥ 1,5/1,5 mm^2 n ≥ 1 **E 90**
	(N)HXCH FE180 E30-E60 4x50 RM/25		**E 90**	
JE-H(St)HRH... Bd FE180 E30-E90	JE-H(St)HRH...Bd FE180 E30-E90 2x2x0,8	Non-standard track W1-A and W1-B.	**Without classification**	**Without classification**
(N)HXH FE180 E90	(N)HXH FE180 E90 4x1,5 RE	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track W1-C and X1-F.	**E 90**	n x ≥ 1,5 mm^2 n ≥ 1 **E 90**
	(N)HXH FE180 E90 4x50 RM		**E 90**	
JE-H(St)H... Bd FE180 E30-E90	JE-H(St)H...Bd FE180 E30-E90 2x2x0,8	Non-standard track W1-C and X1-D.	**Without classification**	**Without classification**
(N)HXCH FE180 E90	(N)HXCH FE180 E90 4x2,5 RE/2,5	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track W1-B and X1-F.	**E 90**	n x ≥ 2,5/2,5 mm^2 n ≥ 1 **E 90**
	(N)HXCH FE180 E90 4x50 RM/25		**E 90**	

Used cables Prysmian by test are classified as follows:

Type of cable	Type of tested cable, single cross-sections and number of conductors	Arrangement	Classification for type of tested cable (by cross-sections and number of conductors)	Classification for type of cable
(N)HXH E30	(N)HXH-J E30 4x1,5 RE	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track Y1-G and Y1-H.	**E 60**	n x ≥ 1,5 mm^2 n ≥ 1 **E 60**
	(N)HXH-J E30 4x50 RM		**E 60**	
JE-H(St)H E30	JE-H(St)H E30 2x2x0,8	Non-standard track Y1-G and Z1-J.	**E 60**	n x 2 x ≥ 0,8 mm n ≥ 2 **E 60**
(N)HXCH E30	(N)HXCH E30 4x1,5 RE/1,5	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track Y1-H and Z1-J.	**E 60**	n x ≥ 1,5/1,5 mm^2 n ≥ 1 **E 60**
	(N)HXCH E30 4x50 RM/25		**E 60**	
(N)HXHX E90	(N)HXHX-J E90 4x1,5 RE	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track Y1-I and Z1-K.	**E 90**	n x ≥ 1,5 mm^2 n ≥ 1 **E 60**
	(N)HXHX-J E90 4x50 RM		**E 60**	
(N)HXCHX E90	(N)HXCHX E90 4x2,5 RE/2,5	In cable trays KBSI60.300.075. Ceiling consoles HDHSMU50.1000 wits brackets HDWKM300. Loading 20 kg.m^{-1}. Consoles in spacing of 1500 mm. Non-standard track Y1-I and Z1-L.	**E 90**	n x ≥ 2,5/2,5 mm^2 n ≥ 1 **E 90**
	(N)HXCHX E90 4x50 RM/25		**E 90**	

The element, cable bearing system VERGOKAN – cable trays with accessories (consoles, brackets, screws etc.) with power and communication halogen free cables DÄTWYLER and Prysmian with circuit integrity maintenance in fire, is classified to classes according to achieved test results of tested cables at tracks. Other classification is not allowed.

4.2 FIELD OF APPLICATION

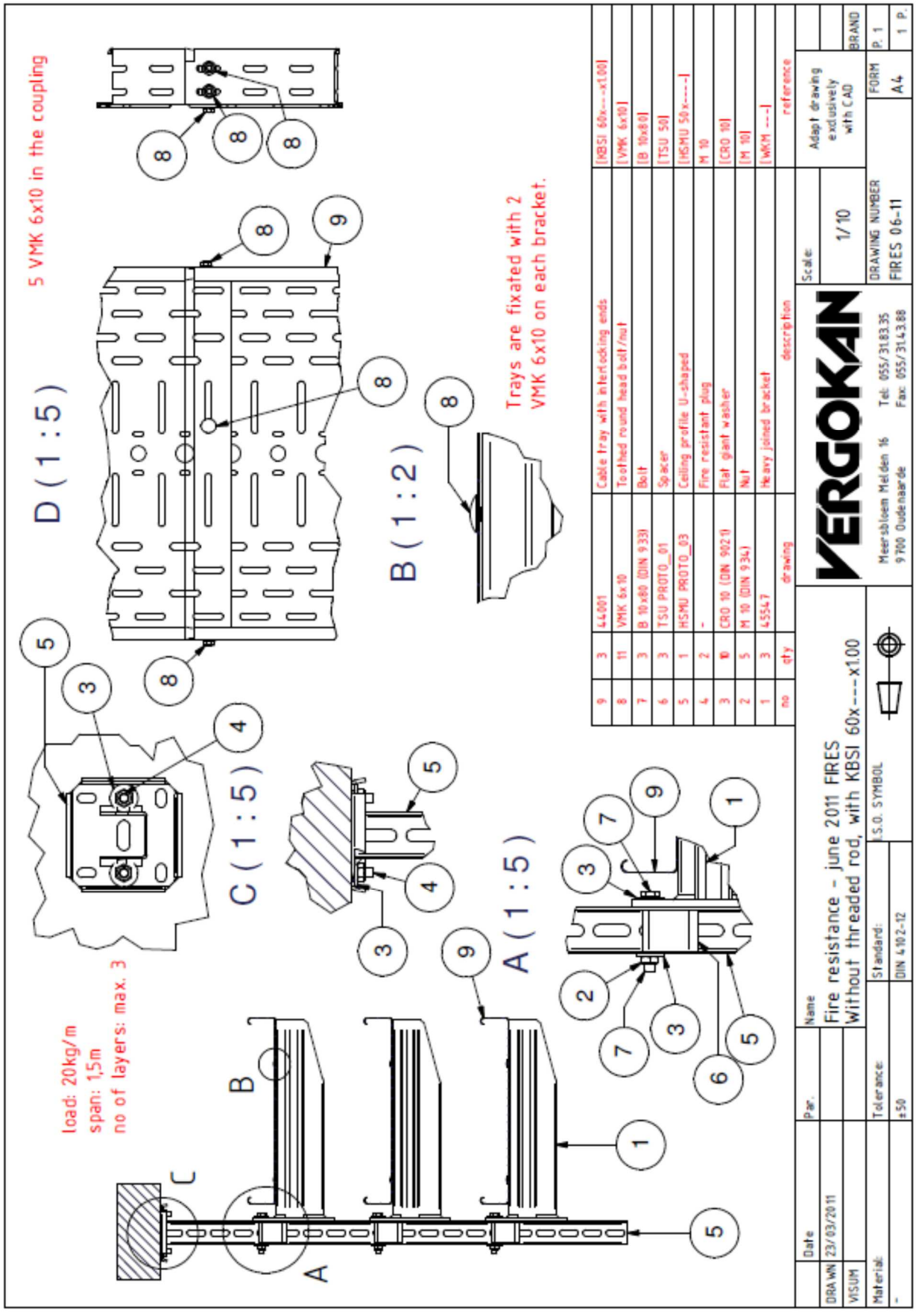
This classification is valid for the following end use applications:

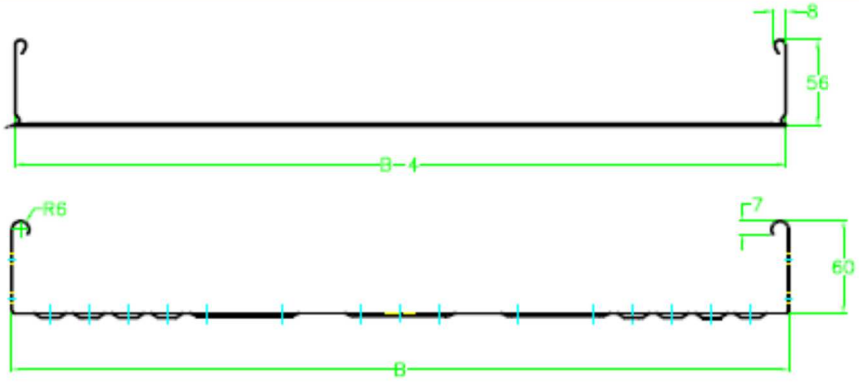
- throughout the period during which circuit integrity is to be maintained, neighboring building components shall not have a negative effect on circuit integrity;
- although testing is only carried out on cables arranged horizontally, test results also apply to cables arranged either diagonally or vertically (e.g. in risers), as long as the cable system is supported in transitional areas (i.e. where it switches from a horizontal to a vertical arrangement) in such a manner that the cables will not slip or kink at corners;
- test results of function in fire test of cables tested at standard supporting construction are also applicable for tested standard supporting construction of other producers;
- test results of function in fire test of cables tested at standard supporting construction are also applicable for cables of other producers tested at standard supporting construction;
- where risers are used, circuit integrity classification only applies if the cable is effectively supported (i.e. with a spacing of supports of 3 500 mm or less and the distance between cable clips is ≤ 300 mm). Figure 5 of standard DIN 4102-12 shows a suitable means of mounting cables on risers. Cables may also be stabilized by a seal at penetrations in floors, provided that the sealant material is of a suitable material class, or using clips of proven suitability. The suitability of any design other than that shown in figure 5 may only be assessed by an accredited test laboratory;
- for vertical systems, the test results obtained for cables mounted singly on the ceiling using single clips apply**.** Brackets of proven suitability may also be used, as long as their spacing is equal to that of the single clips tested;
- test results of testing single cables on the ceiling apply also to cables mounted horizontally on walls;
- test results of testing bunched cables on a ladder or tray also apply to support construction attached to a wall. However, such constructions required proof of suitability by means of a test certificate or other document issued by an accredited testing laboratory;

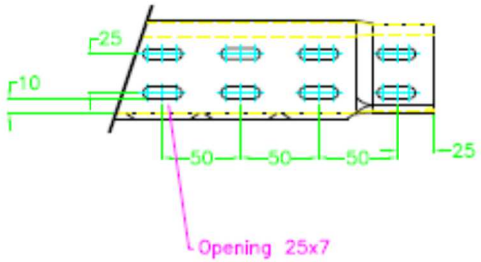
4.3 FIELD OF APPLICATION BEYOND THE APPLICATION DEFINED IN STANDARD

- classification for type of cable (by cross-sections and number of conductors) is valid only for tested cable types, number and cross-sections of conductors;
- classification for cable is valid for all numbers and cross-sections of tested cable type;
- test results of cable systems placed on a non-standard support structures are directly applied only to the tested cable systems;
- test results of cables tested at cable trays or ladders are applicable also for another products trays and ladders (cross, elbow, T-bend, bends and etc.;
- test result obtained from testing of cables with five or four conductors applies also to cables of the same type with smaller or greater number of conductors;
- direct application of test results is only for the tested methods of connecting cable trays and cable ladders;
- test results obtained for cable system with cable trays are directly applicable also for usage of cable trays coverings; the coverings shall be ensured against movement with a proper manner. The weight of the cover must be added to the total load;
- **test result is applicable to welded head plate to steel U-shaped ceiling profiles;**
- **heavy joined steel brackets WKM... shall be fixed to steel U-shaped ceiling profiles HSMU from one or from two sides, providing the maximum loading of U-shaped ceiling profiles is not more than during the fire test and only if sufficient type of fixation of the head plates to ceiling is provided;**
- **is possible use the new type of spacer TSU50 instead of spacer HDTSU50;**
- **is possibly change the construction of tested console (base of console) type HDHSMU in accordance with construction drawings in part 6.4.**

4.4 CONSTRUCTION DRAWINGS







Type	Binnenmaat breedte :	Maat B		
		MD 0.8	MD 1.0	MD 1.25
KBSI 60*75	73	74.6	75	75.5
KBSI 60*100	98	99.6	100	100.5
KBSI 60*150	148	149.6	150	150.5
KBSI 60*200	198	199.6	200	200.5
KBSI 60*250	248	249.6	250	250.5
KBSI 60*300	298	299.6	300	300.5
KBSI 60*350	348	349.6	350	350.5
KBSI 60*400	398	399.6	400	400.5
KBSI 60*500	498	499.6	500	500.5
KBSI 60*600	598	599.6	600	600.5

NOT FOR PRODUCTION

Materiaal dikte : 0.8/1/1.25

Aantal	Wijz.	Omschrijving wijziging	Datum	GET.	VISUM
1	A	Aanpassing sleufgaterpatroon (MF KBSI 60x075x1.00 25/05/2010)	25/05/2010		–

	Naam	Datum	Par.
GET.	Kurt Van Campenhout	02-01-95	<KVC>
VISUM	–	–	–

Benaming: Kabelbaan ineenschuifbaar [KBSI 60*---*-,--]

VERCOKAN
Meersbloem Melden 16
9700 Oudenaarde
Tel. 055/31.43.35
Fax. 055/31.43.48

Schaal : 1/4

Tekening enkel m.b.v. CAD aanpassen

KBAAN

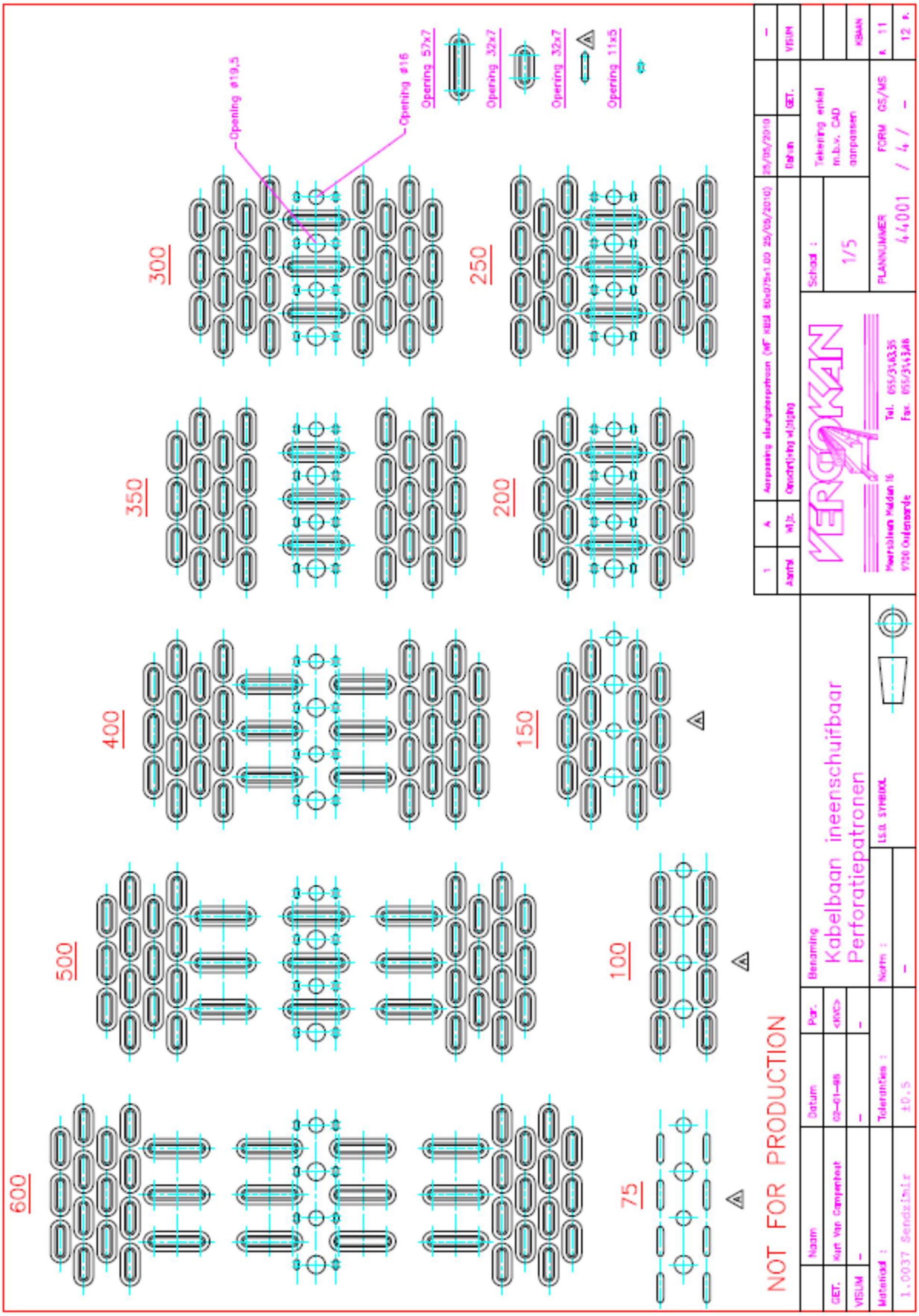
Materiaal :	Tolerantie's :	Norm :	I.S.O. SYMBOOL
1.0037 (Sendzimir)	–	–	

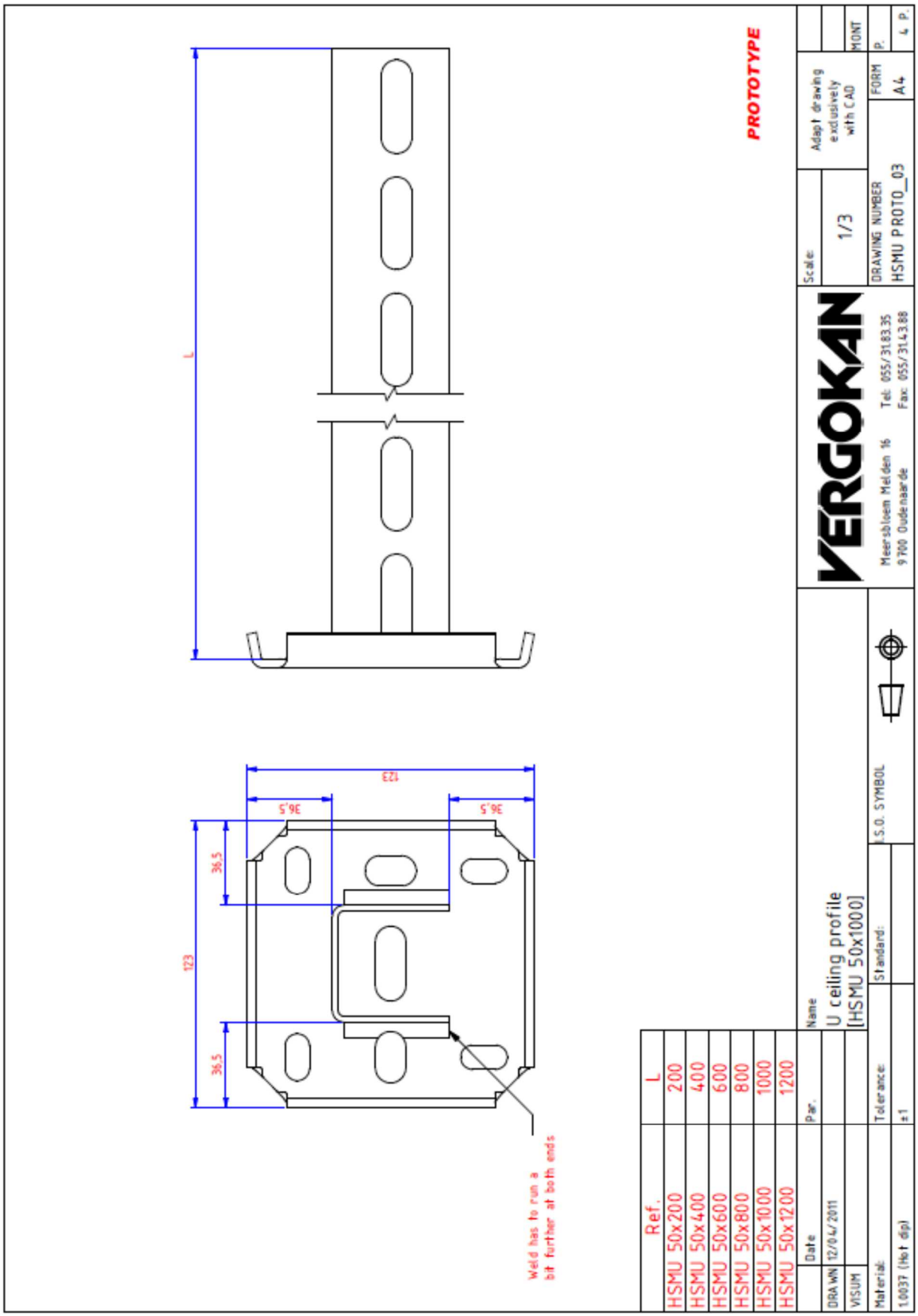
PLANNUMMER 44001 / 4 / –

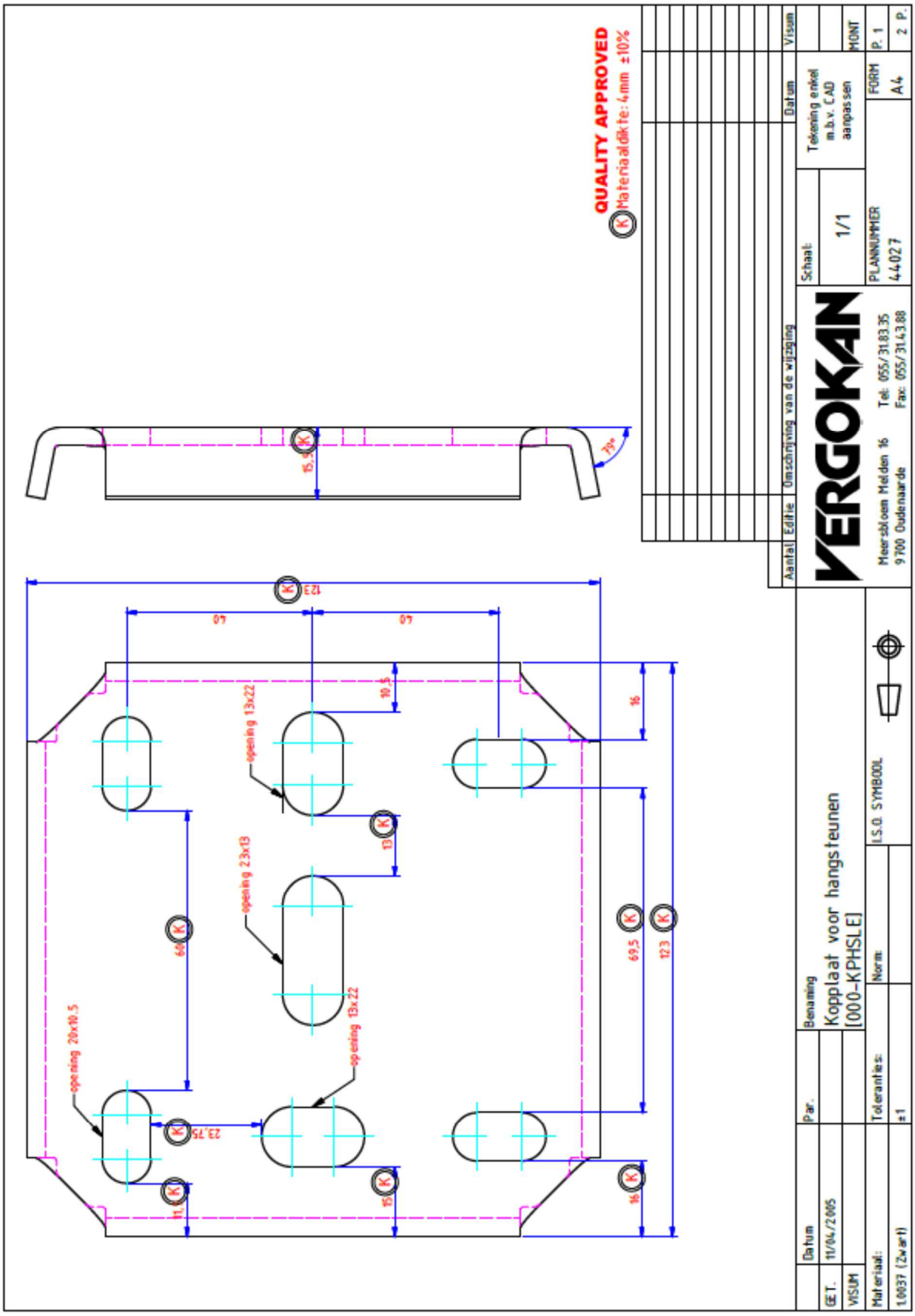
FORM GS/MS

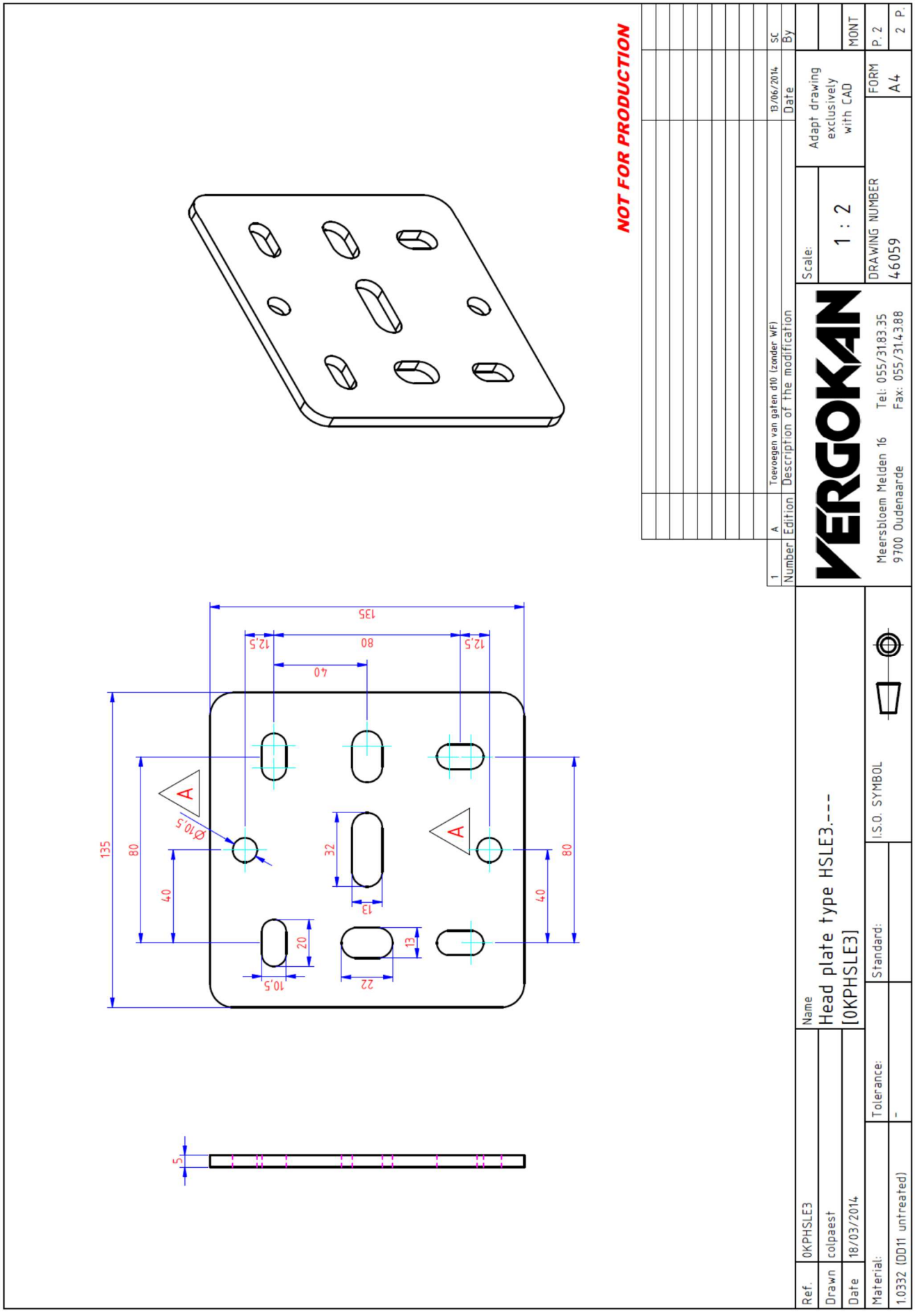
A 12

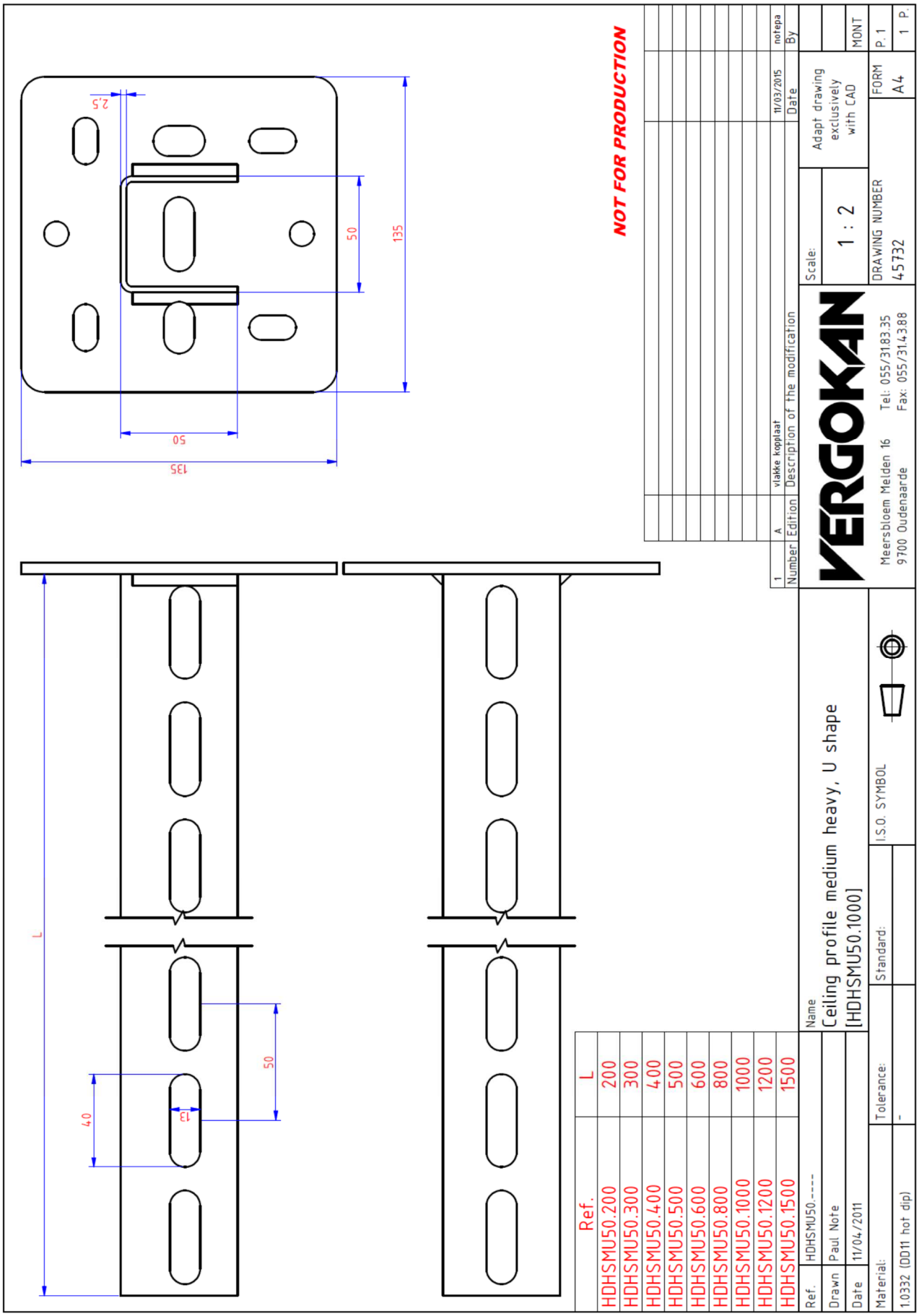
12 P.

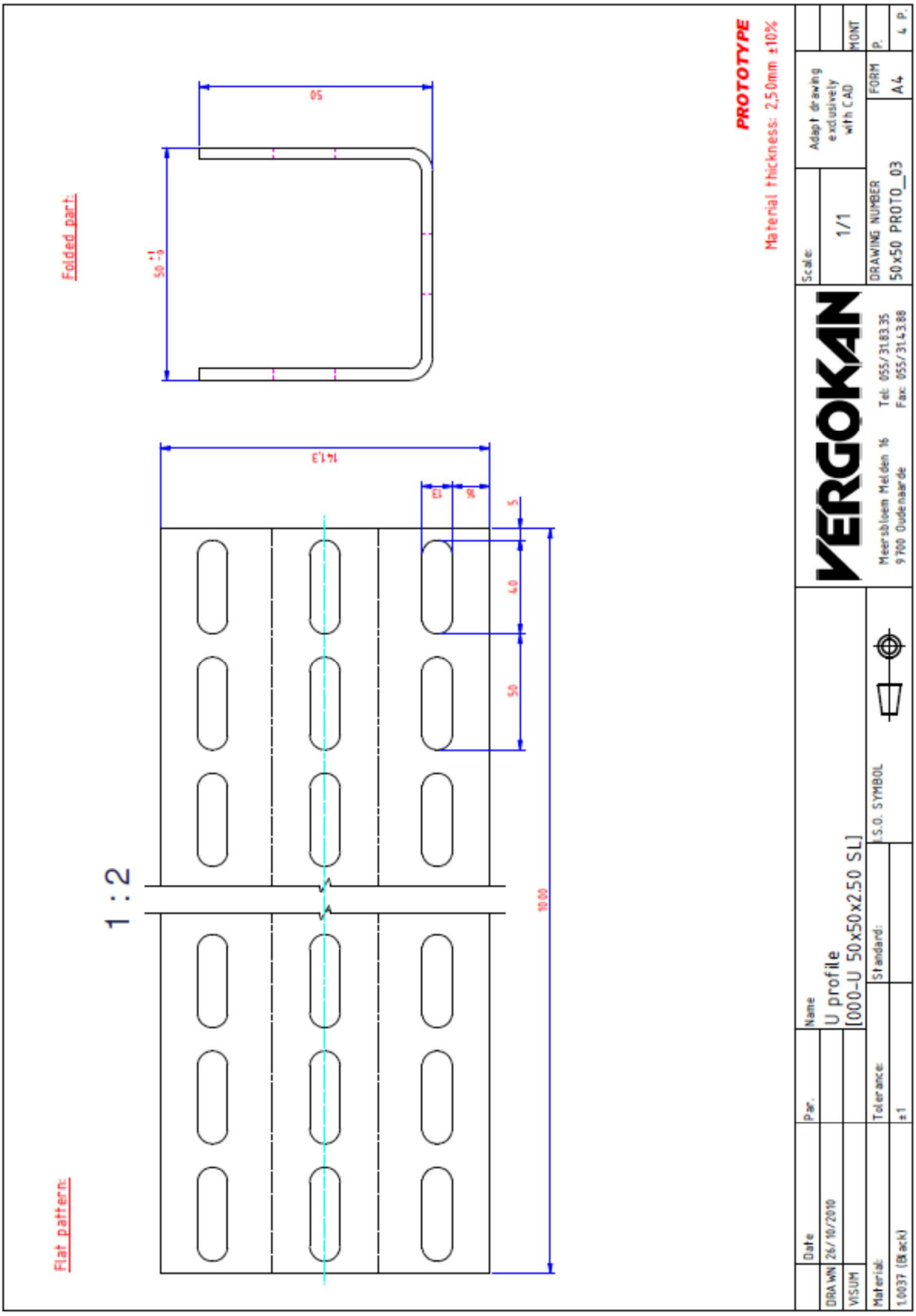

600
500
400
350
300
75
100
150
200
250
Opening ø19,5
Opening ø16
Opening 57x7
Opening 32x7
Opening 32x7
Opening 11x5
NOT FOR PRODUCTION
Kabelbaan ineenschuifbaar
Perforatiepatronen
VERGOKAN
1/5
44001

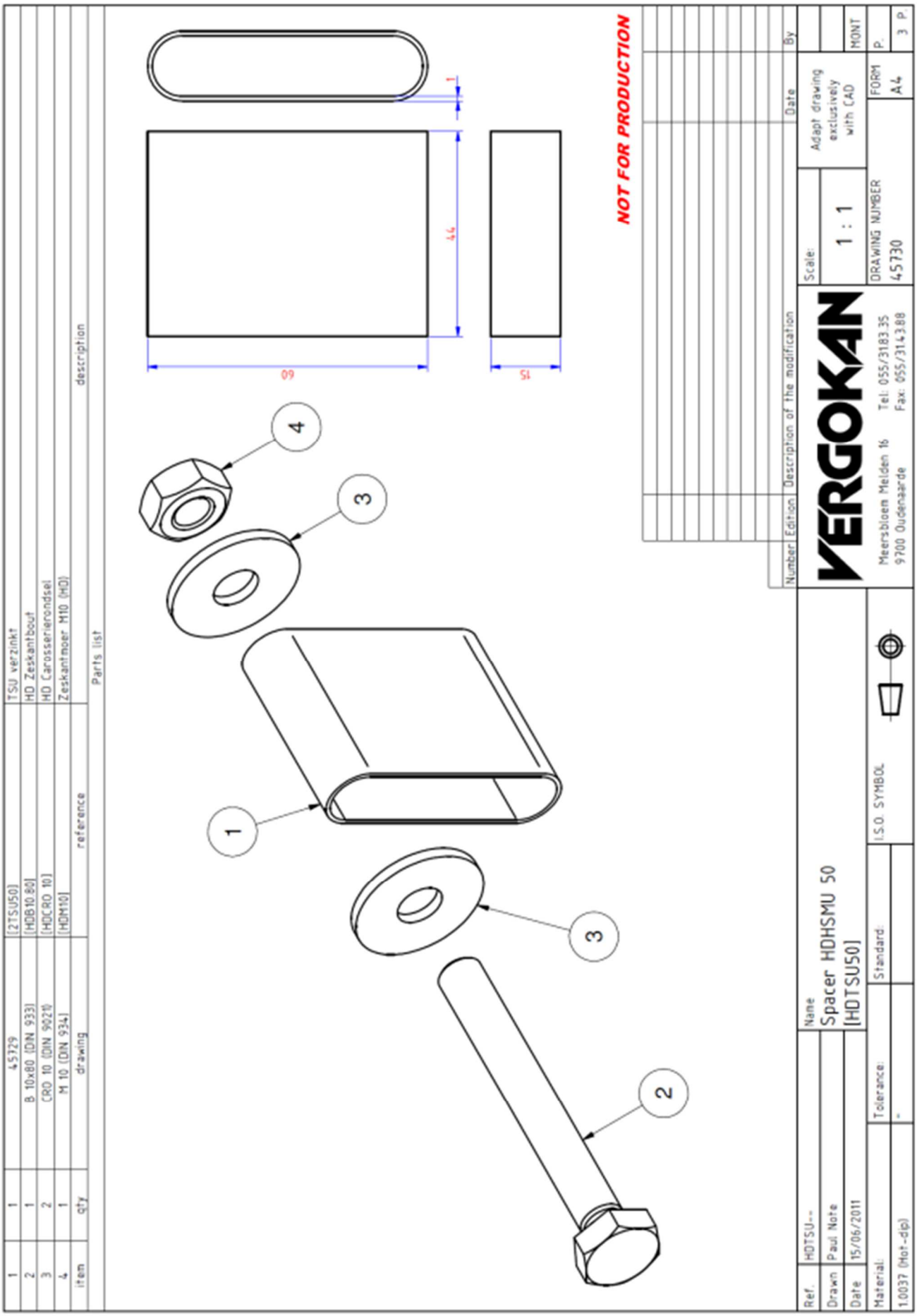

PROTOTYPE
L
123
36,5
36,5
36,5
36,5
Weld has to run a bit further at both ends
Ref.
L
HSMU 50x200 200
HSMU 50x400 400
HSMU 50x600 600
HSMU 50x800 800
HSMU 50x1000 1000
HSMU 50x1200 1200
Name
U ceiling profile [HSMU 50x1000]
Date
Par.
DRAWN 12/04/2011
VISUM
Material:
1.0037 (Hot dip)
Tolerance:
±1
Standard:
I.S.O. SYMBOL
VERGOKAN
Meersbloem Melden 16
9700 Oudenaarde
Tel: 055/31.83.35
Fax: 055/31.43.88
Scale:
1/3
DRAWING NUMBER
HSMU PROTO_03
Adapt drawing exclusively with CAD
FORM
A4
P:
4 P.
MONT

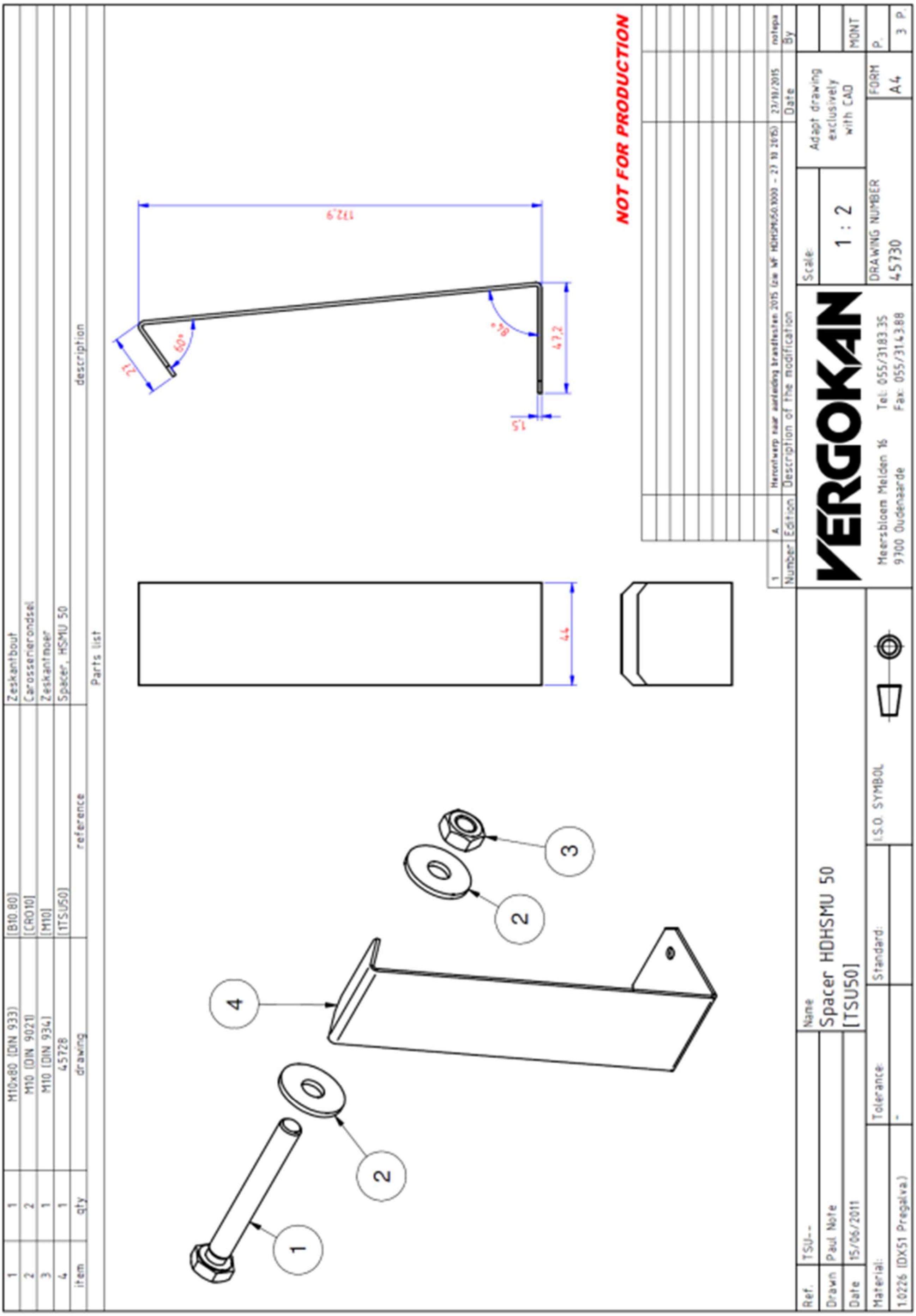

QUALITY APPROVED
Materiaaldikte: 4mm ±10%
VERGOKAN
Meersbloem Melden 16
9700 Oudenaarde
Tel. 055/31.83.35
Fax. 055/31.43.88
Schaal: 1/1
PLANNUMMER 44027
FORM A4
Tekening enkel m.b.v. CAD aanpassen
Aantal Editie Omschrijving van de wijziging Datum Visum
Benaming
Kopplaat voor hangsteunen
[000-KPHSLE]
Par.
Norm:
I.S.O. SYMBOOL
Toleranties:
±1
Materiaal:
1.0037 (Zwart)
GET. 11/04/2005
VISUM
opening 13x22
opening 23x13
opening 20x10.5
15.5
73°
123
69.5
16

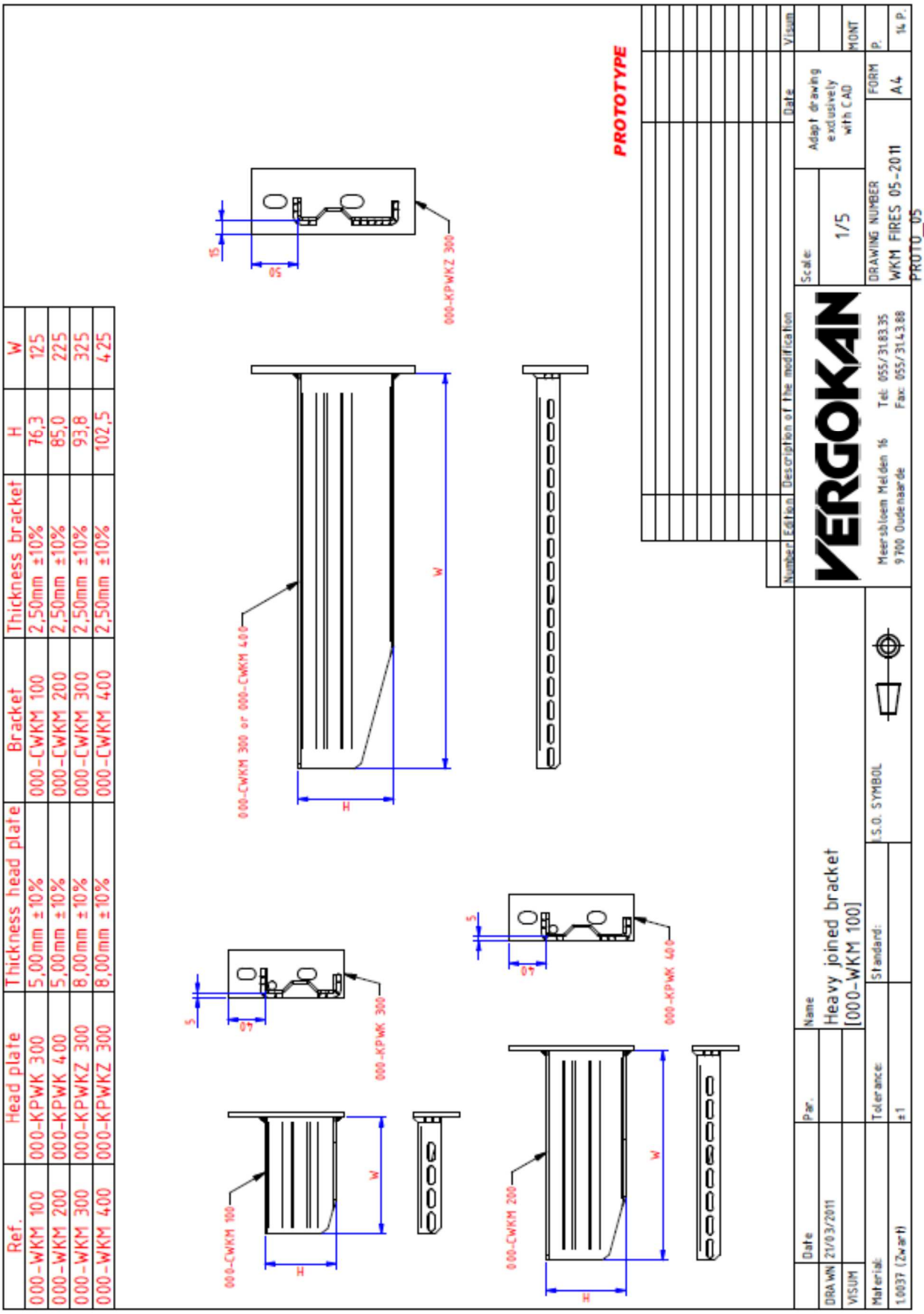

NOT FOR PRODUCTION
1 A Toevoegen van gaten d10 (zonder WF) 13/06/2014 SC
Number Edition Description of the modification Date By
VERGOKAN
Meersbloem Melden 16 Tel: 055/3183.35
9700 Oudenaarde Fax: 055/3143388
Scale: 1 : 2
Adapt drawing exclusively with CAD
DRAWING NUMBER 46059
FORM A4
MONT
P. 2
2 P.
Ref. 0KPHSLE3
Drawn colpaest
Date 18/03/2014
Material: 1.0332 (DD11 untreated)
Name Head plate type HSLE3.---
[0KPHSLE3]
Tolerance: -
Standard:
I.S.O. SYMBOL
135
80
12,5
40
Ø10,5
32
13
20
22
10,5
5
A


NOT FOR PRODUCTION
2,5
50
135
50
135
L
50
40
13
Ref. L
HDHSMU50.200 200
HDHSMU50.300 300
HDHSMU50.400 400
HDHSMU50.500 500
HDHSMU50.600 600
HDHSMU50.800 800
HDHSMU50.1000 1000
HDHSMU50.1200 1200
HDHSMU50.1500 1500
Number Edition Description of the modification Date By
1 A vlakke kopplaat 11/03/2015 notepa
VERGOKAN
Meersbloem Melden 16 Tel: 055/31.83.35
9700 Oudenaarde Fax: 055/31.43.88
Scale: 1 : 2
Adapt drawing exclusively with CAD
DRAWING NUMBER 45732
FORM A4
MONT
P. 1
1 P.
Name Ceiling profile medium heavy, U shape [HDHSMU50.1000]
Ref. HDHSMU50.----
Drawn Paul Note
Date 11/04/2011
Tolerance: -
Standard:
I.S.O. SYMBOL
Material: 1.0332 (DD11 hot dip)


PROTOTYPE
Material thickness: 2,50mm ±10%
Folded part:
50
50 +1 -0
141,3
13
16
5
40
50
1000
1 : 2
Flat pattern:
VERGOKAN
Meersbloem Melden 16
9700 Oudenaarde
Tel: 055/31.83.35
Fax: 055/31.43.88
Scale: 1/1
DRAWING NUMBER 50x50 PROTO_03
FORM A4
Adapt drawing exclusively with CAD
MONT
P. 4 P.
Name U profile [000-U 50x50x2.50 SL]
Par.
Date
DRAWN 26/10/2010
VISUM
Material: 1.0037 (Black)
Tolerance: ±1
Standard:
S.O. SYMBOL


NOT FOR PRODUCTION
VERGOKAN
Meersbloem Melden 16
9700 Oudenaarde
Tel: 055/3183 35
Fax: 055/314388
Spacer HDHSMU 50
[HDTSU50]
Parts list
Adapt drawing exclusively with CAD
1 : 1
DRAWING NUMBER
45730
A4
Description of the modification
Number Edition
Date
By
Ref. HDTSU--
Drawn Paul Note
Date 15/06/2011
Material:
Tolerance:
Standard:
I.S.O. SYMBOL
1.0037 (Hot-dip)
item qty reference description
1 1 45729 [2TSU50] TSU verzinkt
2 1 B 10x80 (DIN 933) [HDB10 80] HD Zeskantbout
3 2 CRO 10 (DIN 9021) [HDCRO 10] HD Carosserieronsdsel
4 1 M 10 (DIN 934) [HDM10] Zeskantmoer M10 (HD)
69
44
15
1


1 | 1 | M10x80 (DIN 933) | [B10.80] | Zeskantbout
2 | 2 | M10 (DIN 9021) | [CRO10] | Carrosserierondsel
3 | 1 | M10 (DIN 934) | [M10] | Zeskantmoer
4 | 1 | 45728 | [TSU50] | Spacer HDSMU 50
item | qty | drawing | reference | description
Parts list
NOT FOR PRODUCTION
172,9
27
60°
84°
47,2
1,5
44
1
2
3
4
2
1 | A | Herontwerp naar aanleiding brandtesten 2015 (zie WF HDHSMU50.1000) - 27 10 2015) | 27/10/2015 | notepa
Number | Edition | Description of the modification | Date | By
VERGOKAN
Meersbloem Melden 16
9700 Oudenaarde
Tel: 055/3183 35
Fax: 055/314388
Scale:
1 : 2
Adapt drawing exclusively with CAD
DRAWING NUMBER
45730
FORM
A4
P.
3 P.
MONT
Ref. TSU--
Drawn Paul Note
Date 15/06/2011
Name
Spacer HDHSMU 50
[TSU50]
Tolerance:
Standard:
I.S.O. SYMBOL
Material:
1.0226 (DX51 Pregalva)



Ref.	Head plate	Thickness head plate	Bracket	Thickness bracket	H	W
000-WKM 100	000-KPWK 300	5,00mm ±10%	000-CWKM 100	2,50mm ±10%	76,3	125
000-WKM 200	000-KPWK 400	5,00mm ±10%	000-CWKM 200	2,50mm ±10%	85,0	225
000-WKM 300	000-KPWKZ 300	8,00mm ±10%	000-CWKM 300	2,50mm ±10%	93,8	325
000-WKM 400	000-KPWKZ 300	8,00mm ±10%	000-CWKM 400	2,50mm ±10%	102,5	425

4.5 LABELING OF CABLE TRACK

Contractor marks cable system by attachment of label which must contain the following informations:
- name of responsible person, who installed the system;
- name of cable system as it is stated in this judgement;
- class of circuit integrity maintenance and classification report number;
- real value of mechanical loading of cable system by cables
- date of assembly of cable system.

If the track is long, it is appropriate to repeat the labeling approximately every 50 m.

5. LIMITATIONS

Load-bearing construction elements for fixing of cable systems must be proved for at least the same fire resistance compare to classified function in fire of cable system.
The construction contractor is solely responsible for proper preparation.

This classification document does not represent type approval or certification of the product.

The classification is valid provided that the product, field of application and standards and regulations are not changed.

Approved by:

Ing. Štefan Rástocký
Head of the testing laboratory

Prepared by:

Miroslav Hudák
Technician of the testing laboratory