

TEST REPORT

Report#: SR-244892

Report Date: March 24, 2021

Customer* Address* Customer Request Info*	DAR METAL INDUSTRIES COMPANY SULAI, EXIT 18, EASTERN RING ROAD, RIYADH, SAUDI ARABIA SO-MIC103250-20210216-12102236
Manufacturer Address	DAR METAL INDUSTRIES COMPANY STREET 59, AL KHARJ INDUSTRIAL CITY, AL KHARJ, K.S.A.
Product Brand Model Technical specifications Country of Mfr.	CABLE TRAY DAR METAL INDUSTRIES None See "cable tray and trunking data drawings" provided by customer K.S.A.
Received Date Test Start Date Test End Date Test Location Test Method	March 22, 2021 March 22, 2021 March 22, 2021 STREET 59, AL KHARJ INDUSTRIAL CITY, AL KHARJ, K.S.A. SASO IEC 61537:2007, NEMA VE1-2002

Test Results:

Result: CONFORM

Remarks: Product conforms to SASO and **NEMA Standards requirements as below.

- The test is conducted at customer's site and witnessed by:
 1. Engr. Bara'a ismael al-amro (DAR-Sales Manager)
 2. Mr. Nabeel shoshara (DAR-Factory Manager)
 3. Mr. Yasser Owais (DAR-Production Manager)
 4. Mr. Abdul Khadeer (DAR-QC Engineer)
 5. Mr. Christian De Alva (Motabaqah)

Authorized Signatory:

Nawaf Mohammed Aldehaim
Technical Manager




- Test result are found on the succeeding pages. According to SAC scope.
- Information with "*" denotes Customer provided information.
- Results are found on the succeeding pages.
- Test(s) with "***" denotes non-accredited test(s). Test(s) with "****" denotes subcontracted test(s).
- Results relates to sample as received and only to the item(s) tested on specified Standard Test Method(s) and specific clause(s).
- Tests are performed on standard rated voltages and frequency in Saudi Arabia.
- Test Report shall not be reproduced, except in full, without written approval of EPTLR,
- The laboratory utilizes decision rule on MSP/7.8/01.01 procedure for tests wherein statement of conformity are stated.
- Unless requested for return, Test Item(s) are destroyed and discarded 90 days after Test Report Date.
- Test conducted may form into unusable and dangerous item(s). EPTLR do not assume liability resulting from the use of the returned item(s).

Result Details:

SASO IEC 61537:2007

Clause	Test Description	Analysis	Result
10.2	SWL test procedure		Pass
	Cable trays/protective casings and joints should be assigned a Safe Working Load (SWL) satisfying the following criteria, tested at the declared temperatures.	See below	P
	All loads should be uniformly distributed (UDL) over the length and width of the samples.	Uniformly distributed	P
	The load should then be gradually increased evenly longitudinally and transversely up to the test load continuously or when a continuous increase is impractical, the load may be increased by increments.	Gradually increased	P
	After loading, the deflection should be measured at the points specified to give a practical mid-span deflection.	Measured at center	P
	The samples should be left and the deflections measured every 5 min until the difference between two consecutive sets of readings is less than 2 % with regard to the first set of the two consecutive sets of readings. The samples should sustain the increased loading without collapsing. Buckling and deformation of the samples is permissible at this loading.	Deflection was recorded See appended table	P
	Note: Alternatively, tests can be carried out: - at any temperature within the declared range if documentation is available which states that the relevant structural properties of the materials as used within the system do not differ by more than 5% of the average between the maximum and minimum property values, or, - only at maximum temperature within the range, if documentation is available, which states that the relevant structural properties of the materials, as used within the system decrease when the temperature is increasing, or at maximum and minimum temperature only.	Tested at 30 °C	P
	Tests should be carried out for the smallest and largest sizes of cable trays lengths or cable ladder lengths, having the same material, joint and topological shape.	Tested for each part	P
	The load should then be increased to 1.7 times the test load.	Complied	P

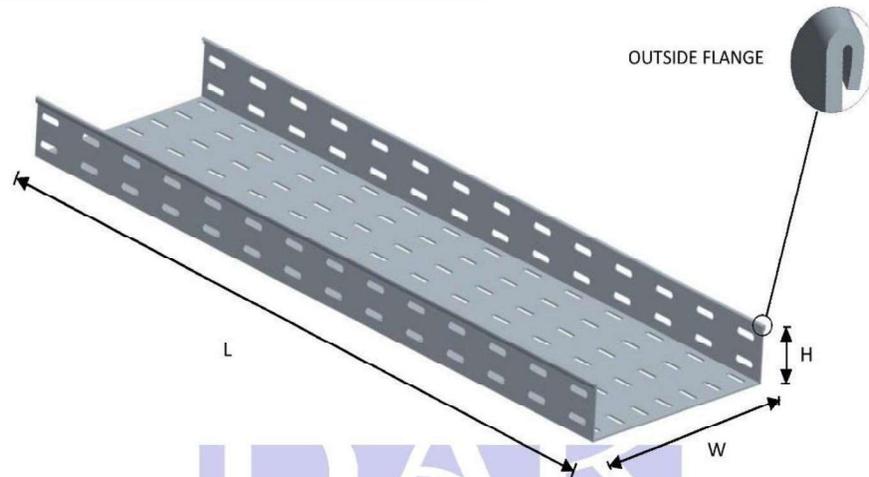
NEMA VE 1-2002

Clause	Test Description	Analysis	Result
5.2.9	Loading to Residual Deflection (Method B)		-
5.2.9.1	Minimum test load	Done	-
	The minimum test load to be applied shall be determined in accordance with the following formula: Total minimum test load = 1.5 x L x w Where: 1.5 = safety factor L = span length, m (ft) W = rated load, kg/m (lb/ft)	No rated load was provided	-
5.2.9.2	Each specimen shall first loaded to 10% of the minimum test load. The vertical deflection of the tray shall be measured at three points along the line midway between the supports and a right angles to the longitudinal axis of the tray. The three points of measurement shall be under each side rail and at the center of the tray. In trays where there are no side rails, the three points of the measurement shall be under the outer edges and under center the center. This measurement shall be known as initial deflection. The loading shall be continued until all the rated load is applied. The deflection shall be measured in the same manner as the initial deflection. The loading shall then be continued until the total minimum test load has been applied. The total load shall then be removed from the tray. After 15 min the vertical deflection shall be measured in the same manner previously used. This measurement shall be known as the residual deflection. The specimen may then be reloaded until it collapses, and the values of the load at collapse shall be recorded. This information concerning the load at collapse point is optional, but some users may require it to obtain product acceptance.	As per customer procedure	-
5.2.9.3	Measurement of residual deflection	Done	-
	The residual deflection at each point of measurement of the two specimens shall be average. Where a residual deflection for either specimen is equal to or exceeds 80% of the initial deflection and, in addition, deviates from the average by more than 10%, two more specimens shall be tested. The average of the three highest values at the point of measurement of the four specimens shall be regarded as the final result.	No residual deflection recorded	-

DAR
Metal Industries Co.

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س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRAY OUTSIDE RETURN FLANGE HDG



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
6	3000 mm	900mm	100 mm	2.0 mm

ص ب ٢٥٠١٨٣ الرياض ١١١٣٩١ المملكة العربية السعودية - هاتف: ٩٢٠٠٠٠٢٤٢ - ٢٤٢١٤٠١ - ٢٤٢٢٨٧٨ - فاكس: ٢٤٢٠٩٥٨
P.O. Box 250183 Riyadh 11391 K.S.A. - Tel: 920000242 - 2421401 - 2422878 - Fax: 2420958
website: www.darmetal.com.sa - E-mail: info@darmetal.com.sa

Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 900 X 100 X 2.0MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

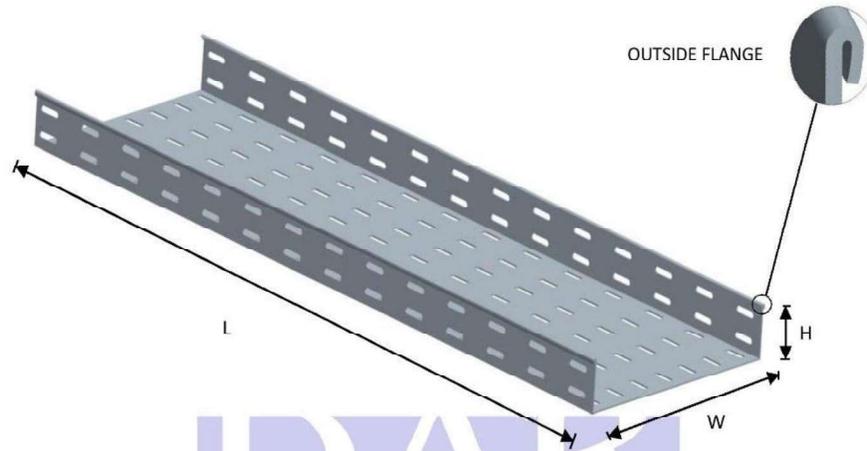
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.038	0.97
2	18	105.84	0.129	3.28
3	30	176.40	0.216	5.49
4	42	246.96	0.292	7.42
5	54	317.52	0.389	9.88
6	66	388.08	0.465	11.81
7	78	458.64	0.536	13.61
8	90	529.20	0.622	15.80
9	102	599.76	0.720	18.29
10	114	670.32	0.797	20.24
11	126	740.88	0.895	22.73
12	138	811.44	0.978	24.84
13	150	882.00	1.075	27.31
14	162	952.56	1.139	28.93

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

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CABLE TRAY OUTSIDE RETURN FLANGE HDGA



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
5	3000 mm	750mm	100 mm	2.0 mm

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website: www.darmetal.com.sa- E-mail: info@darmetal.com.sa

Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 750 X 100 X 2.0MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

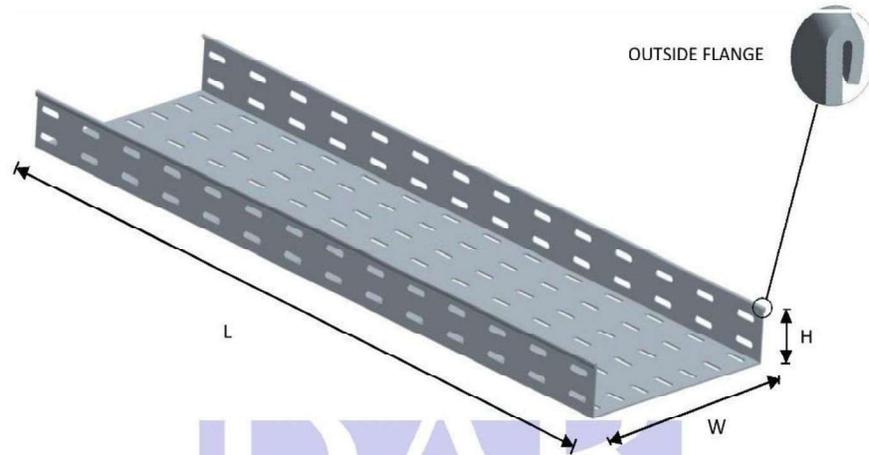
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.038	0.97
2	18	105.84	0.126	3.20
3	30	176.40	0.197	5.00
4	42	246.96	0.270	6.86
5	54	317.52	0.357	9.07
6	66	388.08	0.419	10.64
7	78	458.64	0.505	12.83
8	90	529.20	0.575	14.61
9	102	599.76	0.652	16.56
10	114	670.32	0.730	18.54
11	126	740.88	0.824	20.93
12	138	811.44	1.024	26.01
13	150	882.00	1.125	28.58
14	162	952.56	1.326	33.68

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

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س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRAY OUTSIDE RETURN FLANGE HDGA



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
4	3000 mm	600mm	100 mm	2.0 mm

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website: www.darmetal.com.sa- E-mail: info@darmetal.com.sa

Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 600 X 100 X 2.0MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

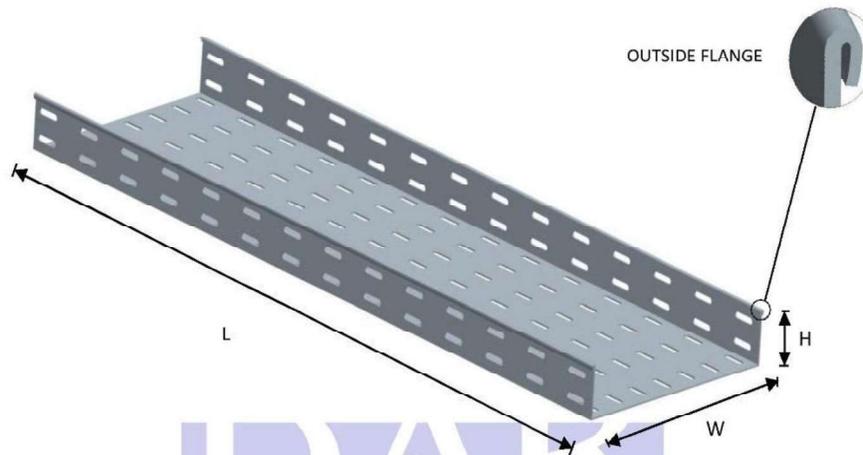
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.058	1.47
2	18	105.84	0.154	3.91
3	30	176.40	0.250	6.35
4	42	246.96	0.348	8.84
5	54	317.52	0.449	11.40
6	66	388.08	0.547	13.89
7	78	458.64	0.645	16.38
8	90	529.20	0.741	18.82
9	102	599.76	0.839	21.31
10	114	670.32	0.927	23.55

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

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س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRAY OUTSIDE RETURN FLANGE HDG



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
7	3000 mm	500mm	100 mm	2.0 mm

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Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 500 X 100 X 2.0MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

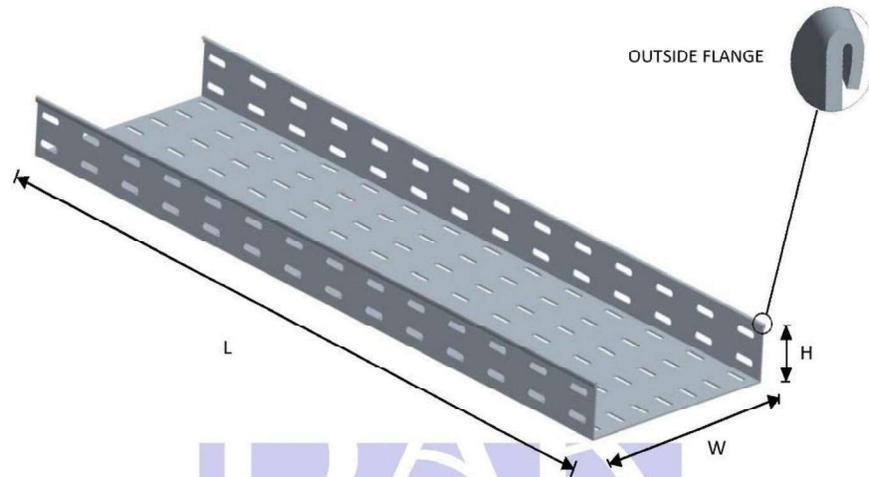
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.060	1.52
2	18	105.84	0.168	4.27
3	30	176.40	0.272	6.91
4	42	246.96	0.367	9.32
5	54	317.52	0.460	11.68
6	66	388.08	0.551	14.00
7	78	458.64	0.638	16.21
8	90	529.20	0.732	18.59
9	102	599.76	0.812	20.62
10	115	676.20	0.903	22.94

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

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س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRAY OUTSIDE RETURN FLANGE HD



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
3	3000 mm	450mm	100 mm	2.0 mm

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website: www.darmetal.com.sa - E-mail: info@darmetal.com.sa

Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 450 X 100 X 2.0MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

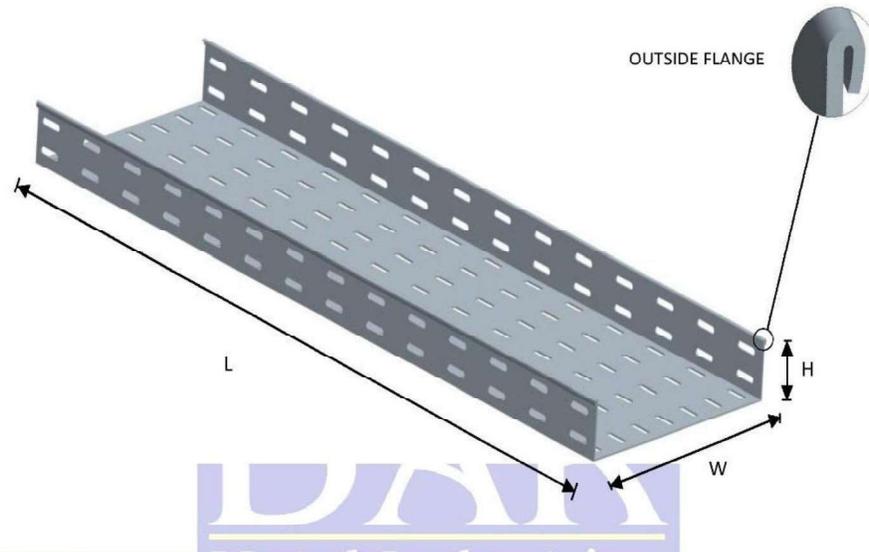
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.057	1.45
2	18	105.84	0.165	4.19
3	30	176.40	0.269	6.83
4	42	246.96	0.360	9.14
5	54	317.52	0.449	11.40
6	66	388.08	0.541	13.74
7	78	458.64	0.625	15.88
8	90	529.20	0.725	18.42
9	102	599.76	0.806	20.47
10	114	670.32	0.890	22.61

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

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س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRAY OUTSIDE RETURN FLANGE HDG



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
2	3000 mm	300mm	100 mm	1.5 mm

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website: www.darmetal.com.sa- E-mail: info@darmetal.com.sa

Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 300 X 100 X 1.5MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

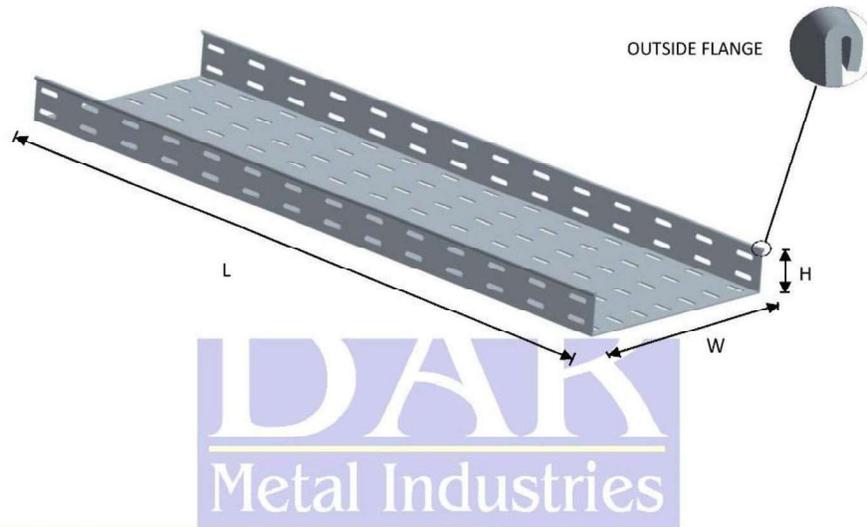
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.054	1.37
2	18	105.84	0.173	4.39
3	30	176.40	0.311	7.90
4	42	246.96	0.419	10.64
5	54	317.52	0.536	13.61
6	66	388.08	0.644	16.36
7	78	458.64	0.877	22.28

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

DAR
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س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRAY OUTSIDE RETURN FLANGE HDGA



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
1	3000 mm	150mm	100 mm	1.5 mm

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Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 150 X 100 X 1.5MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

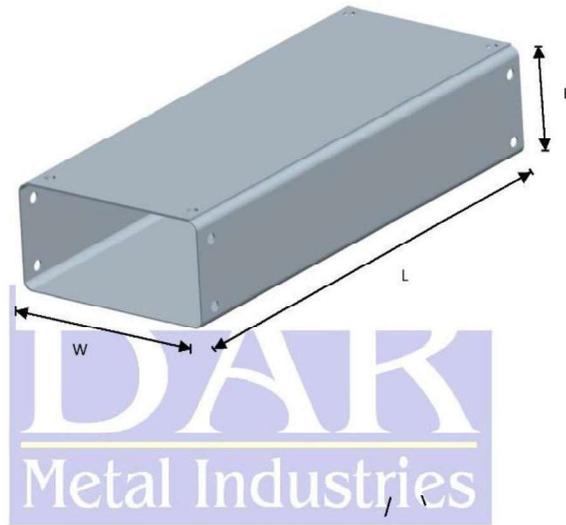
Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.075	1.91
2	18	105.84	0.245	6.22
3	30	176.40	0.395	10.03
4	42	246.96	0.469	11.91

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

DAR
Metal Industries Co.

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دار المعدن للصناعة
س.ت: ١٠١٠٢٠٠٦٨٧ رقم العضوية ١٤٩٥٨٨

CABLE TRUNKING SINGLE COMPARTMENT



DIMENSIONS

Item No.	L: Length	W: Width	H: Side Height	T: Thickness
8	3000 mm	100mm	100 mm	1.5 mm

ص ب ٢٥٠١٨٣ الرياض ١١١٣٩١ المملكة العربية السعودية - هاتف: ٩٢٠٠٠٠٢٤٢ - ٢٤٢١٤٠١ - ٢٤٢٢٨٧٨ - فاكس: ٢٤٢٠٩٥٨
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Name of Product:	CABLE TRAY
Tray Specification:	H.D.G 100 X 100 X 1.5MM, 3.0 MTRS LONG
Loading Material:	Steel strips (0.040 x 0.005 x 3.00 meters)
Loading Material Weight:	5.88 kg.

Test No.:	No. of loading material (pcs.)	Weight of loading material (kg)	Dial gauge reading (inch)	Converted to Millimeters (mm)
Initial	No load	0.00	0.000	0.00
1	6	35.28	0.098	2.49
2	18	105.84	0.155	3.94
3	30	176.40	0.216	5.49
4	42	246.96	0.285	7.24
5	54	317.52	0.353	8.97

REMARKS: No sign of destruction or cracks were noticed while carrying out the load test.

- END OF TEST REPORT -