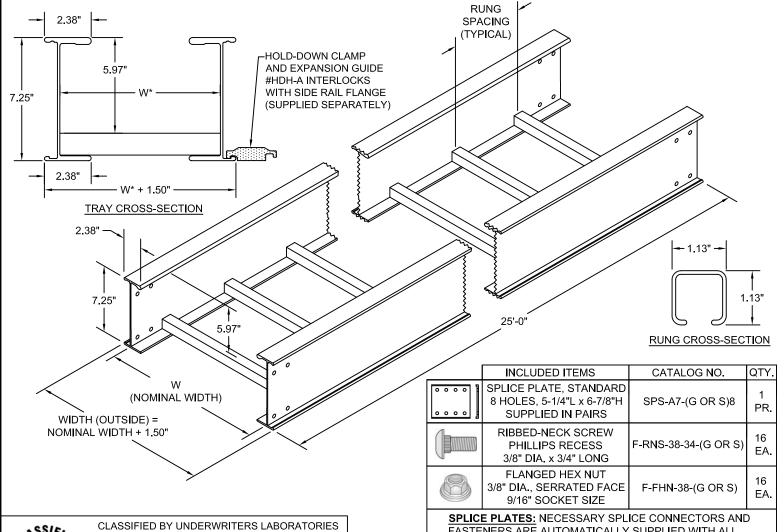


NO.	REVISION	BY	DATE
0	APPROVED	TM	03-21-11
1	ADDED RUNG OPTIONS, HDH-A, REV. TITLE BLOCK. FTG. CLASS	TM	10-06-15

**MATERIAL I.D.** 





ASSIFIE

AS TO IT'S SUITABILITY AS AN EQUIPMENT GROUNDING CONDUCTOR ONLY PER NEC 392. METAL CABLE TRAY IN ACCORDANCE WITH THE STANDARD FOR CABLE TRAY SYSTEMS CANADA CSA-C22.2 NO. 126. (UL FILE NO. E341872)

**MATERIAL: EXTRUDED ALUMINUM ALLOY 6063-T6** 

FINISH: PLAIN (POWDER COATED PAINTS AVAILABLE)

CABLE TRAY TYPE: LADDER, TWO RAILS

LOAD RATING (NEMA): 161 LBS/FT, 20' SPAN, CLASS 20C+

LOAD RATING (CSA): 239 KG/M, 6.0 METER SPAN, CLASS E

SIDE RAIL HEIGHT: 7" NOMINAL (7.25" ACTUAL)

INSIDE LOAD DEPTH: 6" NOMINAL (5.97" ACTUAL)

**BOTTOM:** 1.13" WIDE RUNGS (TUBULAR WITH OPEN SLOT)

CONSTRUCTION: ARC-WELDED ON BOTH SIDES OF RUNGS

MIN. CROSS-SECTIONAL AREA PER NEC 392: 2.00 IN<sup>2</sup>

AMPERAGE RATING PER NEC 392: 2,000 AMPERES

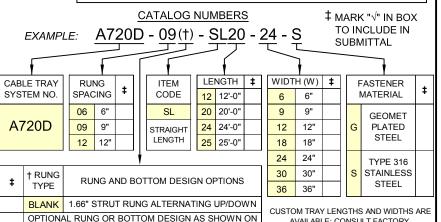
TRAY FITTING CLASS: 3 (2,38" WIDE FLANGES)

MOMENT OF INERTIA (EACH SIDE RAIL):  $13.939 \text{ IN}^4(x-x)$ 

SECTION MODULUS (EACH SIDE RAIL): 3.524 IN3 (x-x)

THIS CABLE TRAY SYSTEM IS IN FULL COMPLIANCE WITH ALL ASPECTS OF THE LATEST REVISIONS OF NEMA STANDARD VE1. CSA C22.2 NO. 126 AND NATIONAL ELECTRICAL CODE ART. 392.

FASTENERS ARE AUTOMATICALLY SUPPLIED WITH ALL TRAYS, SPLICE RESISTANCE IS LESS THAN 0.00033 OHMS. FASTENER FINISHES ARE GEOMET-PLATED STEEL (G) AND TYPE 316 STAINLESS STEEL (S).



**ATKORE** 

560 WHARTON CIRCLE, SUITE E PHONE: 404-696-8585 ATLANTA, GA 30336 USA FAX: 404-696-8599

DRAWING USP-AL-RB-2

SHEET NO. 1 OF 1 DIMENSIONS **INCHES** 

AVAILABLE; CONSULT FACTORY.

DESCRIPTION

LADDER CABLE TRAY STRAIGHT SECTION, ALUM. 7" HIGH, CLASS 20C+

DRAWING NUMBER

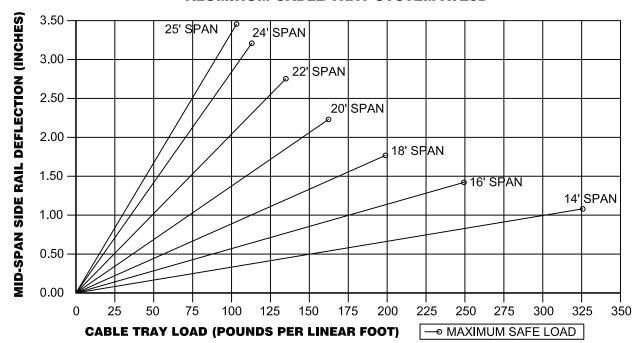
USP-A720D-LA-SL20



NO.	REVISION	BY	DATE	
0	APPROVED	TM	03-08-11	
1	ADDED DATA FOR 25' SPAN	TM	04-20-15	١,
2	REVISED TITLE BLOCK, NOTE 5	TM	10-06-15	

**MATERIAL I.D.** A720D-LC

## SAFE LOAD AND DEFLECTION OF CABLE TRAY SIDE RAILS **ALUMINUM CABLE TRAY SYSTEM A720D**



TRAY	SAFETY	TRAY SAFE LOAD DATA	SUPPORT SPAN (FEET)							
SYSTEM	FACTOR	TESTED PER NEMA VE-1	14	16	18	20	22	24	25 (NOTE 5)	
	1.5	MAX. SAFE LOAD (LBS/FT)	326	249	197	161	132	111	102	
A720D	1.5	DEFLECTION (INCHES)	1.09	1.42	1.79	2.23	2.68	3.19	3.46	
	DEFLECTION MULTIPLIER		0.00333	0.00569	0.00912	0.01385	0.02037	0.02874	0.03394	

SAFETY	RUNG SAFE LOAD LIMITS, TESTED PER NEMA VE-1 SECTION 5.4	TRAY WIDTH (INCHES)						
FACTOR		6	9	12	18	24	30	36
1.5	MAX. SAFE LOAD (LBS, UNIFORM)	2400	1600	1200	800	600	778	649
1.5	MAX. SAFE LOAD (LBS, CONCENTRATED)	1200	800	600	400	300	389	324

- 1. THIS DATA APPLIES TO ALL LADDER, VENTED/TROUGH, AND FLAT-SHEET SOLID BOTTOM CABLE TRAYS THAT EMPLOY SIDE RAIL SYSTEM A720D. ALL OF THESE TRAY TYPES ARE CONSTRUCTED WITH RUNGS.
- 2, DATA IS BASED ON SIMPLE-BEAM TYPE SUPPORTS WITH EVENLY DISTRIBUTED LOADS.
- 3. MAXIMUM SAFE LOAD IS BASED ON A SAFETY FACTOR OF 1.5 APPLIED TO COLLAPSE.
- 4. WHEN SUPPORTED ON MULTIPLE-SPAN ARRANGEMENTS. ACTUAL DEFLECTION WILL BE UP TO 60% LESS THAN THE SIMPLE-BEAM DEFLECTION SHOWN.
- 5. ALL LOAD TESTS WERE CONDUCTED IN ACCORDANCE WITH NEMA STD. VE1, CSA C22.2 NO. 126. 36" WIDE TRAYS WERE TESTED ON 24'-0" SUPPORT SPANS. DATA SHOWN FOR SPANS LESS THAN 24' ARE EXTRAPOLATED PER NEMA VE1. DATA FOR 25' SPAN IS A CONSERVATIVE ESTIMATE BASED ON AN EXTRAPOLATION SIMILAR TO NEMA VE1. DETAILED TEST REPORTS ARE AVAILABLE UPON REQUEST: CONTACT ENGINEERING DEPT.
- 6. MULTIPLY THE DEFLECTION MULTIPLIER BY THE ACTUAL LOAD (LBS/FT) TO CALCULATE THE DEFLECTION (INCHES) AT LOADS LESS THAN THE MAXIMUM SAFE LOAD.
- 7. THIS TRAY SYSTEM WILL SUPPORT A 200 POUND CONCENTRATED STATIC LOAD APPLIED AT THE CENTER OF ANY RUNG, IN ADDITION TO THE FULL SAFE CABLE LOAD, WITHOUT FAILURE OF THE RUNG OR THE SIDE RAILS.



THE LOAD AND DEFLECTION DATA OF THIS CABLE TRAY SYSTEM IS BASED ON **DESTRUCTION LOAD TESTS PER NEMA** VE1, CSA C22.2 NO. 126 THAT WERE WITNESSED AND CERTIFIED ACCURATE BY UNDERWRITERS LABORATORIES, INC.



## United Structural Products, LLC

ATLANTA, GA 30336 USA

560 WHARTON CIRCLE, SUITE E PHONE: 404-696-8585 FAX: 404-696-8599

1 OF 1 DIMENSIONS

**INCHES** 

DESCRIPTION

LOADING DATA FOR CABLE TRAY SYSTEMS A720D

DRAWING NUMBER

USP-A720D-LDATA15-25