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ESR-1460

Reissued 06/2018
This report is subject to renewal 06/2019.

DIVISION: 05 00 00—METALS
SECTION: 05 31 00—STEEL DECKING
SECTION: 05 31 13—STEEL FLOOR DECKING
SECTION: 05 35 00—RACEWAY DECKING ASSEMBLIES
SECTION: 05 36 00—COMPOSITE METAL DECKING

REPORT HOLDER:

KAM INDUSTRIES LTD. DBA CORDECK

EVALUATION SUBJECT:

N-R-G-FLOR® CELLULAR RACEWAY STEEL FLOOR DECK SYSTEM

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DIVISION: 05 00 00—METALS
Section: 05 31 00—Steel Decking
Section: 05 31 13—Steel Floor Decking
Section: 05 35 00—Raceway Decking Assemblies
Section: 05 36 00—Composite Metal Decking

REPORT HOLDER:

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EVALUATION SUBJECT:

N-R-G-FLOR® CELLULAR RACEWAY STEEL FLOOR DECK SYSTEM

1.0 EVALUATION SCOPE

Compliance with the following code:

2006 *International Building Code*® (IBC)

Properties evaluated:

■ Structural

2.0 USES

The N-R-G-FLOR® cellular raceway steel floor deck system is a composite floor deck system used to accommodate wire and cable distribution throughout the floor. The system is used structurally to support gravity loads and is used as a floor diaphragm to transfer lateral forces due to wind or earthquake loading.

3.0 DESCRIPTION

3.1 General:

The Cordeck cellular steel deck panels used in the N-R-G-FLOR system are designated 3KA1F(24). These panels are 24 inches (610 mm) wide and contain three "cells." The cells are formed by a fluted steel panel top sheet that is factory resistance–welded to a flat bottom steel coverage plate that has $^3/_8$-inch-high (3.2 mm) stiffeners located where the bottom coverage plate joins the fluted top sheet. The two outer cells are 3 inches (76.2 mm) high and provide an internal cross-sectional area of 16 in^2 (10 300 mm^2). The center cell is $1^5/_{16}$ inches (33.3 mm) high and provides an internal cross-sectional area of 5.6 in^2 (3600 mm^2). Each vertical web of the outer cells has rolled-in embossments designed to interlock mechanically with the concrete slab to enable the steel deck panels to act compositely with the concrete in resisting applied loads. See Figure 1 for additional details.

3.2 Steel Panels:

The Cordeck 3KA1F(24) cellular steel panels are manufactured from cold-formed, galvanized sheet steel complying with ASTM A 653, SS designation, Grade 40 with either a G60 or a G90 galvanized coating designation. The design base-metal thicknesses for the Nos. 16, 18, 20 gage steel (54, 43 and 33 mil designations) are 0.0600, 0.0474 and 0.0358 inch (1.524, 1.204 and 0.909 mm), respectively.

3.3 Concrete Fill and Reinforcement:

Concrete used to fill the top surface of the deck must be either normal-weight or structural lightweight concrete with a minimum specified compressive strength, f'_c, of 3,000 psi (20 68 kPa) at 28 days. The minimum concrete fill thickness must be $2^1/_2$ inches (64 mm) above the top flute of the deck. Concrete fill must be reinforced with minimum 6x6–W1.4xW1.4 welded plain wire reinforcement complying with ASTM A 185-07 placed in the center of the concrete fill. Where the concrete fill thickness exceeds $3^1/_2$ inches (89 mm), the concrete must be reinforced in each direction with reinforcement having steel cross-sectional area equal to 0.01 times the depth of fill.

3.4 Trench Headers:

Trench headers are bottomless and can be installed as part of the floor deck system described in this report, and are the primary feeder system to facilitate placing electrical cables into the cellular deck raceway. The trench header assembly is VAB36W250H-10, which is up to 10 feet (3048 mm) long. The cover plate is $^3/_{16}$ inch (4.8 mm) thick for widths up to 24 inches (610 mm) and $^1/_4$ inch (6.4 mm) thick for widths up to 36 inches (914 mm). Trench headers have a minimum width of 9 inches (229 mm) and a maximum width of 36 inches (914 mm). The galvanized steel body must be minimum No. 18 gage [0.0478 inch (1.21 mm)].

3.5 Electrical Presets:

The N-R-G Bloc IV electrical preset insert is furnished by Kam Industries Ltd., dba Cordeck. The service fitting components for the electrical preset inserts are installed according to the approved quality documentation over factory-punched holes in the panels. The spacing of the preset electrical inserts must be a minimum of 24 inches (609.6 mm) along the steel panels, with a maximum of one preset electrical insert in each 8 square feet (0.75 m^2) of floor area.

4.0 DESIGN AND INSTALLATION

4.1 Design:

4.1.1 General: Allowable gravity loads must be based on section properties shown in Table 1. Allowable reactions based on web crippling must not exceed values shown in Table 2. Allowable diaphragm values are shown in Table 1.

The section properties and allowable load tables in this report are established using the design thicknesses of the deck panels noted in this report. Additional design criteria are set forth in the "Footnotes to Table 1" in this report.

4.1.2 Vertical Loads: Values in Table 1 indicate maximum unshored spans and allowable composite superimposed gravity loads for concrete filled Cordeck 3KA1F(24) panels. Spans containing trench headers must be designed as noncomposite, using section properties of the panel as noted in Table 1. Allowable reactions based on web crippling for the Cordeck 3KA1F(24) panels shown in Table 2 must exceed the reactions due to applied loads.

4.1.3 Diaphragm Loads: The allowable shear loads in pounds per lineal foot, set forth in Table 1, are for horizontal diaphragms consisting of concrete filled Cordeck 3KA1F(24) panels, with or without trench headers. See Section 4.2.2 for panel-to-support attachment requirements.

The one-third stress increase permitted for Allowable Stress Design, for load combinations in IBC Section 1605.3.2 including wind or seismic forces, must not be used for shear values shown in the diaphragm tables.

The diaphragm design must take into account the following considerations:

- Diaphragm classification (flexible or rigid) must comply with Section 1602 of the IBC; the diaphragm deflection (Δ) must be calculated using the equations noted in the Diaphragm Flexibility Limitations (see Table 3).
- Diaphragm flexibility limitations must comply with Table 3.
- Diaphragm deflection limits must comply with Sections 12.10.1 and 12.12.2 of ASCE 7.
- Horizontal shears must be distributed in accordance with Sections 12.8.4 and 12.9.5 of ASCE 7.

4.1.4 Welds: Arc spot welds to members such as chords, collector elements and structural ties, must have a maximum spacing, in feet, of 35,000 t/q [for **SI:** mm = (6.13×10^6) t/q], where t equals uncoated steel thickness of the steel panel, in inches (mm), and q equals actual diaphragm shear at marginal supports transferred to collector elements, in pounds per foot (N/m). Fillet welds to members such as diaphragm chords must have a maximum spacing in feet of 480 l_w/q [for **SI:** mm = (8.40×10^4) l_w/q], where l_w is the length of weld in inches (mm) [$1^1/_2$ inches (38 mm) long, minimum]. Fillet welds attaching the diaphragm to struts, ties, or other collector elements have a maximum spacing in feet of 300 l_w/q [for **SI:** mm = (5.25×10^4) l_w/q], where q is the actual shear transferred by the collector element, in pounds per lineal foot (N/m).

Allowable shear transfer values at interior lines, perpendicular to panel corrugations, are indicated in Table 1. Two lines of puddle welds may be used to develop the actual shear transfer to collector elements. Where individual panels are cut, the partial panels must be fastened in a manner to fully transfer diaphragm shears to adjacent panels.

4.2 Installation:

4.2.1 General: The deck panels must be installed in accordance with this report and the approved construction documents. If there is a conflict between the approved construction documents and this report, this report governs.

4.2.2 Welding: Arc spot welds must have a fusion area not less than $^1/_2$ inch (12.7 mm) in diameter, or $^3/_8$ inch by 1 inch (9.5 mm by 25 mm). Weld locations are shown in Figure 2. Seam welds must be a minimum of $1^1/_2$ inches (38 mm) long at a maximum of 36 inches (914 mm) on center.

4.2.3 Concrete-filled Phosphatized/painted or Galvanized Deck Panels: Concrete-filled phosphatized/painted or galvanized deck panels must be installed with the phosphatized or galvanized deck panel face in contact with the concrete and the prime painted deck panel surface (for phosphatized/painted) on the underside. The deck panel must be clean and free of foreign materials prior to placement of concrete.

4.2.4 Special Inspection:

4.2.4.1 Concrete: Continuous and periodic special inspection for concrete and concrete reinforcement must be in accordance with IBC Section 1704.4. The inspector's duties include sampling and testing, and verification of concrete mixes, reinforcement types and placement, and concrete placement.

4.2.4.2 Jobsite Welding: Continuous or periodic special inspection for welding must be in accordance with IBC Section 1704.3. Prior to proceeding, the welder must demonstrate his ability to produce the prescribed weld to the special inspector's satisfaction. The special inspector's duties include verification of materials, weld preparation, welding procedures, and welding processes.

4.2.4.3 Periodic Special Inspection: Periodic special inspections in accordance with IBC Section 1707.4 are required where the steel deck systems are used as part of a seismic-force-resisting system in structures assigned to Seismic Design Category C, D, E or F. Periodic special inspections apply to connections. Periodic special inspections also apply where noted in IBC Tables 1704.3 and 1704.4.

4.2.4.4 Continuous Special Inspection: Continuous special inspections must be provided where noted in IBC Tables 1704.3 and 1704.4.

4.2.4.5 Statement of Special Inspections: A statement of special inspections must be prepared by the registered design professional in charge and submitted to the code official as set forth in IBC Section 1705. The statement must include the inspector's duties noted in this section (Section 4.2.4).

5.0 CONDITIONS OF USE

The N-R-G-FLOR® Cellular Raceway Steel Floor Deck System described in this report complies with, or is a suitable alternative to what is specified in, the code indicated in Section 1.0 of this report, subject to the following conditions:

5.1 The deck panels are manufactured, identified and installed in accordance with this report and the approved construction documents. If there is a conflict between the approved construction documents and this report, this report governs.

5.2 Vertical load design of deck without concrete fill must be based on section properties and web crippling values set forth in this report. Vertical load capacity of concrete-filled, composite deck systems must be as set forth in the tables in this evaluation report.

5.3 Since the placement of trench headers, described in this report, interrupts the structural continuity of the steel-panel/concrete-slab composite floor assembly, the steel panel must be designed to carry the entire load of the floor at these locations. Additional

supports may be required for the floor system at the trench duct locations.

5.4 Where the Cordeck panels are used as part of a diaphragm:

5.4.1 The one-third stress increase permitted for Allowable Stress Design, for load combinations in IBC Section 1605.3.2 including wind or seismic forces, must not be used for shear values shown in the diaphragm tables.

5.4.2 Allowable shear values are as set forth in the tables accompanying this report for the type of deck panel involved.

5.4.3 Diaphragm deflections must not exceed the permitted relative deflections of walls between the diaphragm level and the floor below. Section 4.1 and the flexibility limitations shown in Table 5 may be used as a guide in lieu of the rational analysis of the anticipated deflections.

5.4.4 Diaphragms may be zoned by varying deck gage and/or connections across a diaphragm to meet varying shear and stiffness demands.

5.5 The minimum 28-day compressive strength of the concrete must be 3,000 psi (20.7 MPa).

5.6 Calculations and details demonstrating that the loads applied to the decks comply with this report must be submitted to the code official for approval. Calculations and drawings must be prepared, signed, and sealed by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

5.7 Special inspection must be provided in accordance with Section 4.2.4 of this report.

5.8 The Cordeck 3KA1F(24) panels are fabricated at the Kenosha, Wisconsin, facility of KAM Industries, Ltd., dba Cordeck, under a quality control program with inspections conducted by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Steel Deck Roof and Floor Systems (AC43), dated October 2010.

7.0 IDENTIFICATION

7.1 A label on each bundle of Cordeck panels bears the project number, company name of Cordeck, product designation (3KA1F24), gage thicknesses of the steel, panel length, and the ICC-ES evaluation report number (ICC-ES ESR-1460).

7.2 The report holder's contact information is the following:

KAM INDUSTRIES LTD. dba CORDECK
12620 WILMOT ROAD
KENOSHA, WISCONSIN 53142
(262) 857-3000
www.cordeck.com

TABLE 1—STEEL DECK STRUCTURAL PROPERTIES AND ALLOWABLE DIAPHRAGM SHEARS[1-13]

STEEL DECK TYPE				CONCRETE SLAB DEPTH AND DENSITY				CONCRETE VOLUME REQUIRED			CONCRETE SLAB DEPTH AND DENSITY				CONCRETE VOLUME REQUIRED			CONCRETE SLAB DEPTH AND DENSITY				CONCRETE VOLUME REQUIRED		
Thickness	Sectional Properties																							
Cellular Deck Type: 3KA1F (24)				$5^1/_2$-inch & 145 pcf				C_V = 1.22			$5^1/_2$-inch & 110 pcf				C_V = 1.22			$6^1/_4$-inch & 110 pcf				C_V = 1.45		
Gage No. (Fluted/Flat)	+S	I_{Net}	Y	Maximum Unshored				W_d	k1	k3	Maximum Unshored				W_d	k1	k3	Maximum Unshored				W_d	k1	k3
	-S	I_{Gross}	A_S	Span	L_U	W	q		k2	k4	Span	L_U	W	q		k2	k4	Span	L_U	W	q		k2	k4
20/20	0.552	1.225	0.992	Single	9.2	227	1,900	51	5,690	3,494	Single	10.1	201	1,460	40	5,690	3,494	Single	9.6	251	1,715	47	6,637	3,494
	0.657	1.485	1.088	Multiple	10.7	187	1,846		1,470	1,520	Multiple	11.7	167	1,413		1,471	1,114	Multiple	11.1	208	1,666		1,716	1,351
18/20	0.760	1.503	1.107	Single	11.0	185	1,848	52	6,569	3,726	Single	12.1	163	1,412	40	6,569	3,726	Single	11.4	206	1,668	47	7,691	3,726
	0.847	1.827	1.289	Multiple	12.2	162	1,815		1,433	1,510	Multiple	13.3	145	1,384		1,433	1,104	Multiple	12.7	180	1,634		1,678	1,341
18/18	0.783	1.748	1.003	Single	11.1	194	1,896	53	7,565	4,658	Single	12.2	171	1,453	41	7,565	4,658	Single	11.6	213	1,709	48	8,827	4,658
	0.894	1.990	1.450	Multiple	12.5	166	1,849		1,467	1,476	Multiple	13.6	149	1,413		1,467	1,071	Multiple	13.0	184	1,666		1,712	1,308
16/18	0.955	2.035	1.093	Single	12.3	173	1,867	53	8,441	4,891	Single	13.6	151	1,424	42	8,441	4,891	Single	12.9	190	1,680	49	9,878	4,891
	1.085	2.337	1.651	Multiple	13.4	150	1,827		1,438	1,470	Multiple	14.9	135	1,392		1,438	1,064	Multiple	14.2	167	1,646		1,683	1,301
16/16	0.967	2.305	1.014	Single	12.5	177	1,913	54	9,430	5,823	Single	13.7	157	1,466	42	9,430	5,823	Single	13.1	195	1,723	49	11,007	5,823
	1.135	2.500	1.812	Multiple	13.9	154	1,866		1,464	1,447	Multiple	15.2	137	1,424		1,464	10,141	Multiple	14.4	172	1,683		1,709	1,278

For **SI:** 1 inch = 25.4 mm, 1 psi = 6.89 kPa, 1 inch^2 = 645.16 mm^2, 1 pcf = 16.018 kg/m^3, 1 inch^4 = 4 162 314 mm^4, 1 inch ^{3} = 16 387 mm^3, 1 foot = 304.88 mm, 1 psf = 0.0479 kN/m^2, 1 plf = 14.6 N/m.

See next page for footnotes to Table 1.

Footnotes to Table 1:

1. Notation:
   A_S = Area of steel, in^2 per foot of deck width.
   C_V = Volume of concrete, cubic yards per square (100 ft^2).
   Gage = Gage of deck (base-metal thickness), fluted section/flat plate, where:
   No. 20 Gage = 0.0358 inch; No. 18 Gage = 0.0474 inch; and No. 16 Gage = 0.060 inch.
   I_C = Moment of inertia of the composite section, $in.^4$ per foot of width.
   I_{Net} = Net moment of inertia (for deflection) of the deck only, $in.^4$ per foot of deck width.
   I_{Gross} = Gross (full) moment of inertia of the deck only, $in.^4$ per foot of deck width.
   k1 = Factor for calculating *W* (Note 2).
   k2 = Factor for calculating *W* (Note 2)
   k3 = Factor for calculating *q* (Note 3).
   k4 = Factor for calculating *q* (Note 3).
   L_U = Maximum unshored span, feet.
   q = Allowable lateral shear load at span *Lu*, plf. See Note 3 for other spans.
   +S = Section modulus for deck in positive bending, in^3 per foot of deck width.
   -S = Section modulus for deck in negative bending, in^3 per foot of deck width.
   Span = *Single* = deck with 2 supports; *Multiple* = deck with 3 or more supports.
   W = Allowable superimposed vertical load, psf, at span L_u. See Note 2 for other spans.
   W_d = Weight of deck and concrete, psf.
   Y = Dimension from deck bottom to deck neutral axis, inches.

2. To calculate the allowable superimposed vertical load *W* (psf) at span *L* (ft.):

   $W = (k1/L + k2) / L$ (Unshored)

   $W = [(k1/L + k2) / L] - 0.221W_d$ (Shored at mid-span)

3. To calculate the allowable lateral shear load *q* (plf) at span *L*:

   $q = [(k3/L + k2) / L] + k4$ [For spans without trench header(s)]

   $q = [(k3/L + k2) / L] + (k4 / T)$ [For spans with trench header(s), where *T* is the trench header width (minimum 1.5 ft.)]

4. Diaphragm deflections are determined in accordance with Table 3. Deck spans are categorized as “rigid,” except those spans with trench headers, which are categorized as “semi-rigid.” For purposes of calculations, *F* may be assumed to be the highest value assigned to each category.

5. Shoring calculations based on deck supporting dead load of concrete plus either 20 psf uniform live load or 150-pound concentrated live load for flexure. Dead load deflection limited to 1/180 span length, but not to exceed $^3/_4$ inch.

6. Shoring is required at mid-span where span exceeds L_U.

7. Total slab depth is nominal from top of concrete to bottom of steel deck.

8. Concrete fill must have a minimum specified compressive strength, f'_c, of 3,000 psi at 28 days.

9. Support reactions for span due to dead loads and live loads are shown in Table 2.

10. Superimposed loads meet the deflection criteria in IBC Table 1604.3, and the limitations in ACI 318 Table 9.5(b), except the third deflection limitation is met by performing calculations where the moment of inertia of the composite section, I_C, is considered in the design.

11. Arc-spot welds attaching panels to supports are depicted in Figure 2. For fire-resistant-rated constructions, additional requirements for spacing of connections must be considered in addition to connection spacing requirements based on structural capacity.

12. Concrete fill must be reinforced with minimum 6x6–W1.4xW1.4 welded plain wire reinforcement complying with ASTM A 185-07 placed in the center of the concrete fill. Where fill thickness exceeds $3^1/_2$ inches, the concrete must be reinforced in each direction with reinforcement having steel cross-sectional area equal to 0.01 times the depth of fill.

13. Where concentrated loads may be encountered, two-way shear must be evaluated in accordance with ACI 318 Section 11.12 (Special Provisions for Slabs and Footings), with the following modifications:
   • The depth of concrete fill may be considered the effective depth, *d*, and
   • The shear strength, V_n, may not exceed $2b_o d\sqrt{f'_c}$.

TABLE 2—ALLOWABLE REACTIONS[1,2,3,4] FOR CORDECK 3KA1F(24)
(Based on Web Crippling)

DECK 3KA1F(24)		ALLOWABLE REACTIONS (lbs per foot of deck width)				
Nominal Thickness (gage/gage)	Design Base Metal Thickness (in./in.)	End Reaction[5] when Bearing Length is Minimum:			Interior Reaction[6] when Bearing Length is Minimum:	
		2 in.	3 in.	4 in.	4 in.	5 in.
20/20	0.0358 / 0.0358	626	718	795	1,256	1,351
18/20	0.0474 / 0.0358	1,047	1,193	1,316	2,086	2,236
18/18	0.0474 / 0.0474	1,047	1,193	1,316	2,086	2,236
16/18	0.0600 / 0.0474	1,611	1,824	2,005	3,193	3,412
16/16	0.0600 / 0.0600	1,611	1,824	2,005	3,193	3,412

For **SI:** 1 inch = 25.4 mm, 1 plf = 14.6 N/m.

[1]Tabulated values are based on a steel yield point of 37,000 psi.
[2]Tabulated values are ASD allowable reactions complying with Section C3.4 of AISI–NAS.
[3]The allowable values are reactions (or concentrated loads) applied to the bare deck and to composite decks during construction prior to the concrete fill achieving the minimum specified compressive strength.
[4]Decks must be welded to supports in accordance with Sections 4.1.4 and 4.2.2 of this report.
[5]Minimum bearing length for reactions at panel end supports.
[6]Minimum bearing length for reactions at panel interior supports.

TABLE 3—DIAPHRAGM FLEXIBILITY LIMITATION[1,2,3]

FLEXIBILITY CATEGORY	*F*	MAXIMUM SPAN IN FEET FOR MASONRY OR CONCRETE WALLS	SPAN-DEPTH LIMITATION			
			ROTATION NOT CONSIDERED IN DIAPHRAGM		ROTATION CONSIDERED IN DIAPHRAGM	
			Masonry or Concrete Walls	Flexible Walls[4]	Masonry of Concrete Walls	Flexible Walls[4]
Very Flexible	More than 150	Not Used	Not Used	2:1	Not Used	$1^1/_2$:1
Flexible	70-150	200	2:1 or as required for deflection	3:1	Not Used	2:1
Semi-flexible	10-70	400	$2^1/_2$: 1 or as required for deflection	4:1	As required for deflection	$2^1/_2$:1
Semi-rigid	1-10	No Limitation	3:1 or as required for deflection	5:1	As required for deflection	3:1
Rigid	Less than 1	No Limitation	As required for deflection	No Limitation	As required for deflection	$3^1/_2$:1

For **SI:** 1 foot = 304.8 mm, 1 lbf/ft. = 14.6 mm.

1. Roof diaphragms are to be investigated regarding their flexibility and recommended span-depth limitations. Refer to tables in this report for value of *F*.

2. Roof diaphragms supporting masonry or concrete walls are to have their deflections limited to the following amount:

$$\Delta wall = \frac{H^2 f'_c}{0.01(Et)}$$

Where:
H = Unsupported height of wall, ft.
t = Thickness of wall, in.
E = Modulus of elasticity of wall material for deflection determination, psi.
f'_c = Allowable compressive strength of wall material in flexure, psi. For concrete: $f_c = 0.45\ f'_c$.
For masonry: $f_c = F_b = 0.33 f'_m$.

3. The total deflection Δ of the diaphragm may be computed from the equation:

$$\Delta = \Delta_t + \Delta_m$$

Where:
Δ_t = Flexural deflection of the diaphragm determined in the same manner as the defection of beams.
Δ_m = Web defection may be determined by the equation:

$$\Delta_m = \frac{q_{ave} L_V F}{10^6}$$

Where:
L_v = Distance in feet between vertical resisting element (such as shear wall) and the point to which defection is to be determined.
q_{ave} = Average shear in diaphragm in pounds per foot over length *Lt*.
F = Flexibility factor: The average microinches a diaphragm web will deflect in a span of 1 foot under a shear of 1 pound per foot.

4. When applying these limitations to cantilevered diaphragms, the allowable span-depth ratio is half that shown.

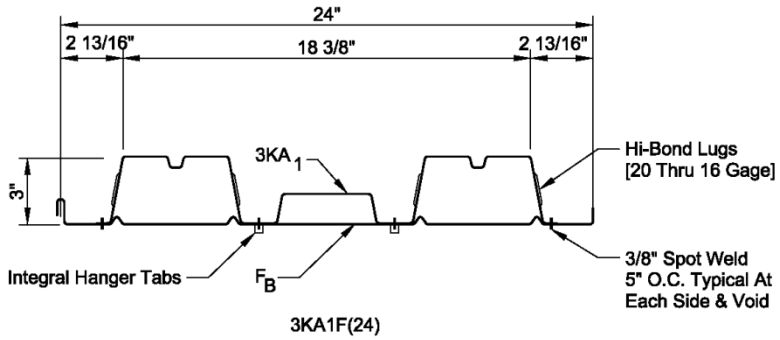


FIGURE 1—CELLULAR DECK DETAILS

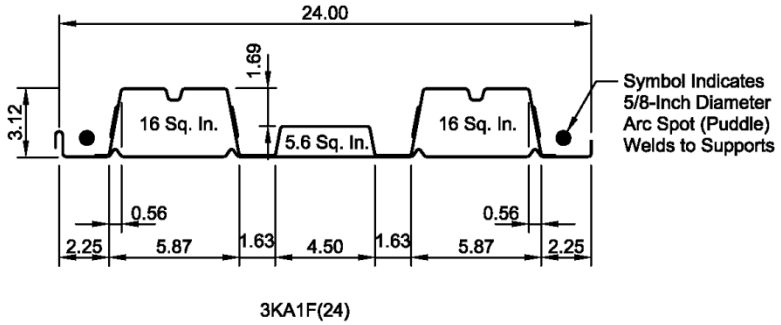
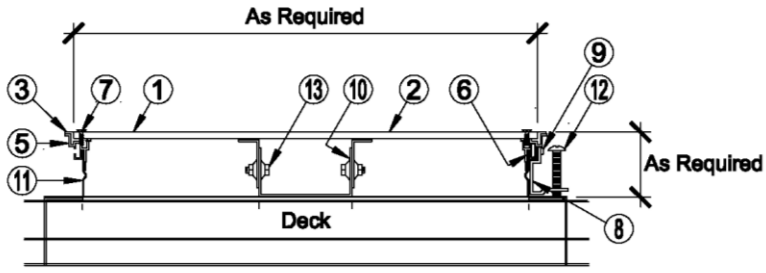


FIGURE 2—WELD PATTERN



1. 1/4" (6.35 mm) thick steel roller levelled steel cover plate.
2. Aluminum or vinyl trim - factory installed for carpet position and shipping position (reverse
3. Aluminum or vinyl trim - factory installed for carpet position and shipping position (reverse for tile floors, see finishing notes & details).
4. No. 16 gage galvanized steel duct body. (not shown for clarity)
5. Aluminum siderail with continuous screw slot.
6. Five function combination clip.
   a. adjusts c. supports e. anchors
   b. couples d. aligns
7. Cover hold down screw - stainless steel.
8. Combination clip securing plate.
9. Combination clip attaching screw.
10. Trench header leveling foot (not shown for clarity)
11. Galvanized steel side rail
12. Leveling screw (shipped separately)
13. Adjustable power compartment divider.
14. Center U-shaped channel-Power compartment standard widths:
    12" wide trench = 3 1/2" power compartment
    18" wide trench = 4" power compartment
    24" wide trench = 5" power compartment
    30" wide trench = 6 1/2" power compartment
    36" wide trench = 8" power compartment

FIGURE 3—TRENCH HEADER