

# Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc. P.O. Box 16620 Little Rock, AR 72231 Phone 501-834-3320 Fax 501-834-5416

Date: 10/3/2023

Return Request: 10/13/2023 Project: Regions HNTB Supplier: Custom Metals Manufacturer: Price

Submittal: Grilles, Registers, & Diffusers

Submittal Number: 23 00 00-04

**Drawing # and Installation:** Mechanical Drawings

#### **ARCHITECT**

DLR Group 2525 McKinnon St. Suite 800 Dallas, TX 75067 214-747-2511

#### **GENERAL CONTRACTOR**

Baldwin & Shell 1000 W. Capitol Ave. Little Rock, AR 72201 501-374-8677

#### **ENGINEER**

Pettit & Pettit 201 East Markham, Suite 400 Little Rock, AR 72201 501-374-3731

#### **MECHANICAL SUBCONTRACTOR**

Comfort Systems USA (Arkansas), Inc. 9924 Landers Rd. N. Little Rock, AR 72117 501-834-3320

Notes:	

CSUSA PROJECT NO. 23-2014

chowell@comfortar.com



# **CUSTOM METALS**

A DIVISION OF LEXICON, INC. P.O. Box 16390, Little Rock, AR 72231 Telephone (501) 490-4400 Fax (501) 490-4422 www.lexicon-inc.com

Job: HNTB @ W. CAPITAL

Spec Section: Grilles, Registers, & Diffusers

Item: Grilles & Diffusers

Submitted by:

Joe Minton Jr.

**HVAC Project Manager** 

(501) 607-0043

09-13-2023



# Grilles/Registers/Diffusers Submittals

Job Name: HNTB

Job Location: Little Rock Date Printed: 9/12/2023 Spec Section: 15 - HVAC

Contact:

7631 Northshore Place N. Little Rock, AR 72118

Date Printed: 9/12/2023 Job Name: HNTB



### All-In-One Detailed Submittal Schedule Grilles/Registers/Diffusers

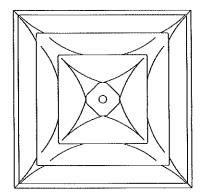
#	Qty	Model	Tag	Unit Size	Inlet Size	Border	Pattern	Face Size	Airflow (CFM)	NC	Accessories
1	6	SCD	CD-1-6	6	6	31		24, 24	0	N/A	3C, FC
31 - 15	/16" T-B	lar Lay-In aı	nd Surface	Mount Applica	ation   3C - 3 C	ones (Defac	ılt) ∦ FC - Fixe	d Core			
2	8	SCD	CD-1-8	8	8	31		24, 24	0	N/A	3C, FC
31 - 15	/16" T-8	Bar Lay-In a	nd Surface	Mount Applica	ation   3C - 3 C	ones (Defai	ılt)   FC - Fixe	d Core			
3	6	SCD	CD-1-10	10	10	31		24, 24	0	N/A	3C, FC
31 - 15	/16" T-B	Bar Lay-In a	nd Surface	Mount Applica	ation   3C - 3 C	ones (Defai	ult)   FC - Fixe	ed Core			
4	14	PDDR	RA-1		22x22	3	sq	22x22, 24x24	0	N/A	F-ST, PL-ST, C
22x22	· 22" x 2	2" (559mm	x 559mm)	3 - T-Bar La	y-in for 15/16 i	n. Flat Tee	SQ - Square	Inlet   F-ST - Ste	el   PL-ST - Steel   C -	Nomina	l - 2" Backpan
5	1	PDDR	RA-2		10	3	RĐ	10, 24x24	0	N/A	F-ST, PL-ST, A
10 - 10	" (254m	m)   3 - T-f	Bar Lay-in fo	or 15/16 in. Fl	at Tee   RD - R	ound Inlet	F-ST - Steel	PL-ST - Steel   A	- Stamped Backpan		
6	16	CF		48.00, 1	1	EF			0	N/A	No-Acc
1 - 1 5	ot   EF -	Exposed Fr	ame No-	Acc - No Acces	sories	•					
7	16	CFP		48.00	10				0	N/A	STANDARD, STL
10 - 10	" Round	Inlet   STA	NDARD - S	tandard Const	ruction   STL -	Steel Const	ruction				-

# **Performance Notes**



- 1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and
- Throw data is based on the temperature differential (Dt), in degrees Fahrenheit (°F), between supply air temperature and room temperature. Ċ.
  - Throw values, in feet (ft), are provided at terminal air velocities of 150 fpm, 100 fpm, and 50 fpm for supply applications. The NC, sound pressure level, is based on a room absorption of 10dB re 10<sup>-12</sup> Watts in each octave band.
    - - Blanks (--) indicate an NC level below 15.
    - Air flow is in cubic feet per minute (cfm) 4.6.6.
- Static pressure (Ps), velocity pressure (Pv), and total pressure (Pt) are in inches of water (in. w.g.).

# SCD Square Cone Diffuser



**Duct Diameter:** 6"

Backpan Height (B): 2 1/2"

Cone Depth (C): 1 1/16"

Ceiling Module: 24" x24"

Ceiling Opening:

No. of Cones:

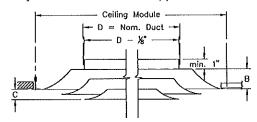
22" x 22"

3 Cones

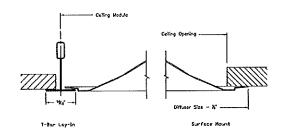
(Surface Mount)

Border: 31

15/16" T-Bar Lay-In or Surface Mount Application



#### Frame Detail:



#### Notes:

- · 360° radial horizontal air pattern
- Fixed core with removable plug button. For surface mount installation, use of a plaster frame is recommended.
- For 9/16" flat tee installation with style 31 frame, cross-tees must be firmly secured. Locking any unopposed cross tees to the main beam with clips such as Armstrong STAC is recommended. Corner clips from ceiling suppliers may also be used, or order 916 clip in GRD-PARTS (confirming fit with ceiling on site is recommended).
- Integral hanger loops
- Factory tolerance +/- 1/32"



Scan for link to additional product information

#### Material:

· Diffuser: Steel

#### Finish:

. B12 - Standard White

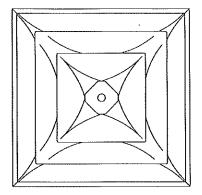
PROJECT: HNTB ENGINEER:

DESCRIPTION: Square Cone Diffuser SCD-1-2/II/6//24/24/31//3C/FC/////B12

SUBMITTAL NO: 258274-F

CUSTOMER:

# SCD Square Cone Diffuser



**Duct Diameter:** 8"

Backpan Height (B): 2 1/2"

Cone Depth (C): 1 1/16"

Ceiling Module: 24" x24"

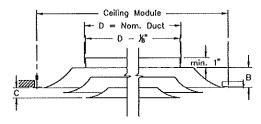
Ceiling Opening: 22" x 22"

(Surface Mount)

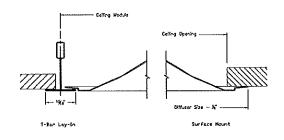
No. of Cones: 3 Cones

Border: 31

15/16" T-Bar Lay-In or Surface Mount Application



#### Frame Detail:



#### Notes:

- · 360° radial horizontal air pattern
- Fixed core with removable plug button. For surface mount installation, use of a plaster frame is recommended.
- For 9/16" flat tee installation with style 31 frame, cross-tees must be firmly secured. Locking any unopposed cross tees to the main beam with clips such as Armstrong STAC is recommended. Corner clips from ceiling suppliers may also be used, or order 916 clip in GRD-PARTS (confirming fit with ceiling on site is recommended).
- Integral hanger loops
- Factory tolerance +/- 1/32"



Scan for link to additional product information

#### Material:

Diffuser: Steel

#### Finish:

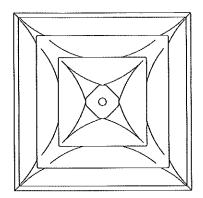
. B12 - Standard White

PROJECT: HNTB ENGINEER:

DESCRIPTION: Square Cone Diffuser SCD-1-2////8//24/24/31//3C/FC//////B12

SUBMITTAL NO: 258274-F CUSTOMER:

# SCD Square Cone Diffuser



Duct Diameter: 10"

Backpan Height (B): 2 1/2"

Cone Depth (C): 1 1/16"

Ceiling Module: 24" x24"

Ceiling Opening:

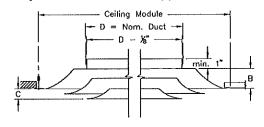
22" x 22"

(Surface Mount)

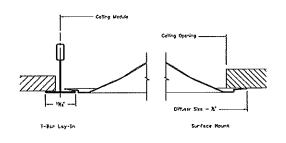
No. of Cones: 3 Cones

Border: 31

15/16" T-Bar Lay-In or Surface Mount Application



#### Frame Detail:



#### Notes:

- 360° radial horizontal air pattern
- Fixed core with removable plug button. For surface mount installation, use of a plaster frame is recommended.
- For 9/16" flat tee installation with style 31 frame, cross-tees must be firmly secured. Locking any unopposed cross tees to the main beam with clips such as Armstrong STAC is recommended. Corner clips from ceiling suppliers may also be used, or order 916 clip in GRD-PARTS (confirming fit with ceiling on site is recommended).
- Integral hanger loops
- Factory tolerance +/- 1/32"



Scan for link to additional product information

#### Material:

· Diffuser: Steel

#### Finish:

· B12 - Standard White

PROJECT: HNTB ENGINEER:

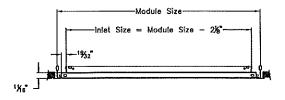
DESCRIPTION: Square Cone Diffuser SCD-1-2/II/10//24/24/31//3C/FC/III//B12

SUBMITTAL NO: 258274-F

CUSTOMER:

# **PDDR**

# **Perforated Return Diffuser**

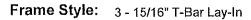


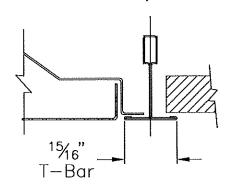
Module Size:

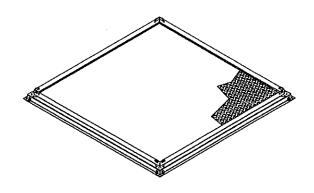
24"x24"

Inlet Size:

22"x22"







#### **Finish**

. B12 - Standard White

# **Notes**

- · Face panel is removable
- · Integral hanger loops
- Factory tolerance +/- 1/32"

#### Construction

- Perforated face 3/16" holes, 51% free area
- F-ST Steel face
- · Steel backpan and outer frame
- · Steel spring latches



Scan for link to additional product information

PROJECT: HNTB

ENGINEER:

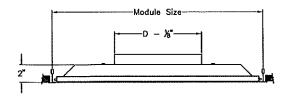
**DESCRIPTION:** Perforated Return Diffuser

PDDR-1-2/I/IN/SQ/22x22//24x24/3/F-ST/PL-ST/C//////B12

SUBMITTAL NO: 271091-A CUSTOMER:

# **PDDR**

# **Perforated Return Diffuser**

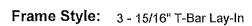


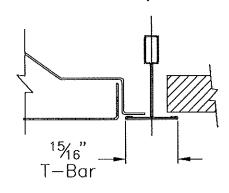


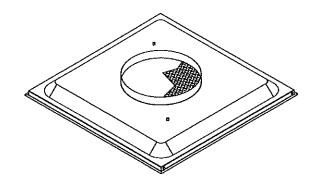
24"x24"

Inlet Size:

10" round







#### **Finish**

. B12 - Standard White

#### Notes

- · Face panel is removable
- Integral hanger loops
- Factory tolerance +/- 1/32"

#### Construction

- Perforated face 3/16" holes, 51% free area
- F-ST Steel face
- Steel backpan and outer frame
- · Steel spring latches

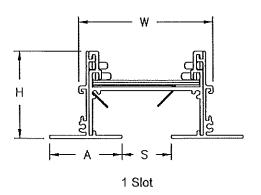


Scan for link to additional product information

PROJECT: HNTB ENGINEER:

DESCRIPTION: Perforated Return Diffuser PDDR-1-2/I/IN/RD/10//24x24/3/F-ST/PL-ST/A//////B12 SUBMITTAL NO: 271091-A CUSTOMER:

#### **Custom Flow** CF



Slot Qty	s	Α	A H W		Opening Width*
1	1"	1 7/16"	1 3/4"	2 3/4"	3 3/8"

 $^\star$  Opening width is outside dimension of field built plenum with hemmed edges. If no plenum is used, opening width may be additionally reduced by up to 1/4" (6mm).

Style:

AS - Adjusta Slot

Ordered Size:

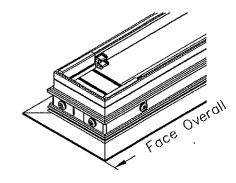
48.00"

Frame Style:

EF - Exposed Frame

#### **Endcaps**

#### XX Mitered Endcaps

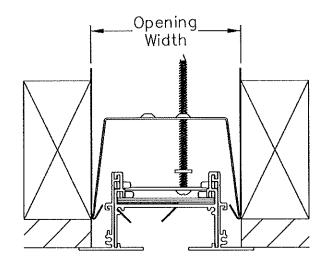


End Condition	Face Overall Length				
XX	Ordered + 11/16"				

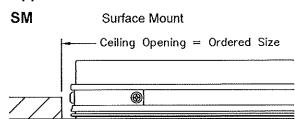
# Mounting:

C

**Concealed Mounting Brackets** 



# **Application**



**PROJECT: HNTB** 

**ENGINEER:** 

**DESCRIPTION:** Custom Flow

CF-1-2//I/IN/48.00/Single/AS/1.0/1/SM/EF/C/XX/DPC/BFR/No-Acc//No-CT/B12

SUBMITTAL NO: 267998-N **CUSTOMER:** 

#### **Material**

- · Extruded aluminum frame & spacers
- · Steel pattern controllers
- · Plastic locking pins
- · Coated steel fasteners
- · Coated steel concealed mounting brackets

#### **Notes**

- Minimum length 12" (305mm)
- For installation instructions, instructions for drywall finishing, or instructions for field trimming, please see the CF installation manual
- · Field trimming not recommended for X ends
- Replacement parts can be ordered through CFK or GRD-PARTS models
- · For use with model CFP, UP, and UPL plenums
- Factory tolerance ±1/32" (1mm)



Scan for link to additional product information and installation instructions.

#### **Finish**

- · Diffuser face: B12 Standard White
- Interior surface: BFR B17 black upper frame stack (AS, RT)
- · Pattern controllers B17 black

PROJECT: HNTB

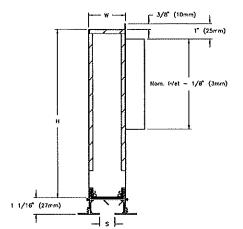
**ENGINEER:** 

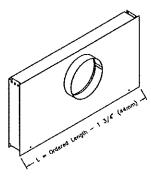
**DESCRIPTION:** Custom Flow

CF-1-2//I/IN/48,00/Single/AS/1.0/1/SM/EF/C/XX/DPC/BFR/No-Acc//No-CT/B12

SUBMITTAL NO: 267998-N CUSTOMER:

#### **CFP Custom Flow Plenum**





Length:

48.000"

Inlet Size:

10" Round Inlet

s	Slots	Н	W
1"	1	13"	2 7/16"

Plenum Compatibility Chart									
Diffuser Frame Style & Mounting	EF (LI)	FM (LI)	TG916	TG1516	TZ- 4	TZ- 6	CMF- EF	FM- CMF	FM EF
NO-MOUNT	•	•	•	•	٠	•			
HB	•	•			•	•			•
HBN		•	•	•		П			
MP-DRxHB							•	•	•
MP-D625xHB							•	•	•
AxHB							•	•	

FLAT - Flat Edge (screw attached to diffuser neck)

#### Material

· Coated steel

#### **Finish**

· MILL - Unpainted

#### Insulation

• CF+E - Coated Fiberglass Insulation with insulated endcaps (sides, top, and endcaps)

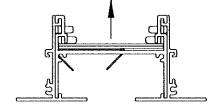
#### Notes

- . Use with Custom Flow (CF) diffusers
- · When plenum endcaps are not positioned directly over diffuser spacer bar, install blankoff from plenum endcap to next spacer bar.
- For installation instructions, please see CF installation manual
- Factory tolerance ±1/16" (2mm)

# **Plenum Options**

Standard Construction







Scan for link to additional product information and installation instructions.

**PROJECT: HNTB** 

**ENGINEER:** 

**DESCRIPTION:** Custom Flow Plenum

CFP-1-2//I/IN/48,000/FLAT/1,0/1/13.000/10/CL//NO-DAMPER/CF+E/STANDARD/STL/MILL

SUBMITTAL NO: 269573-M **CUSTOMER:**