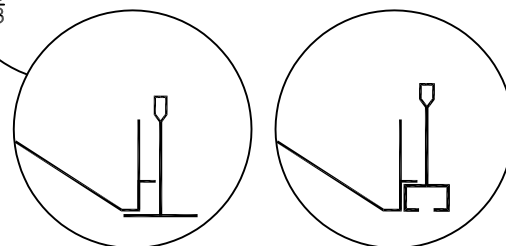
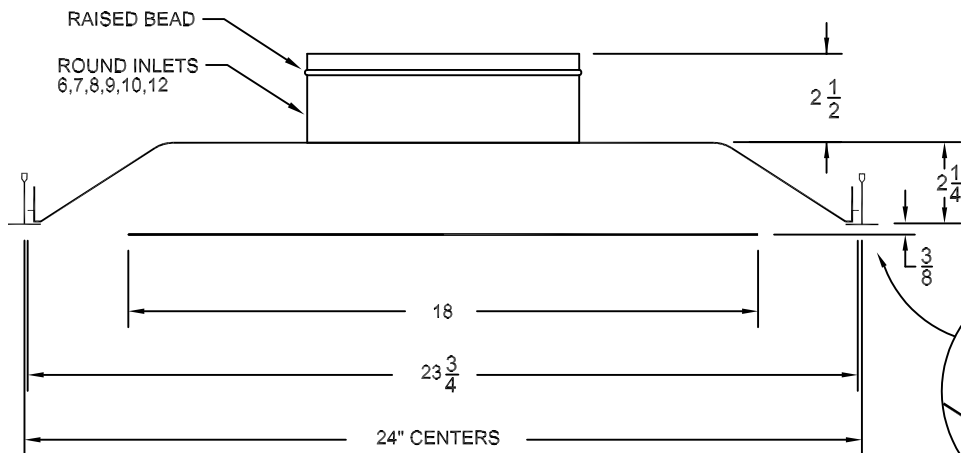
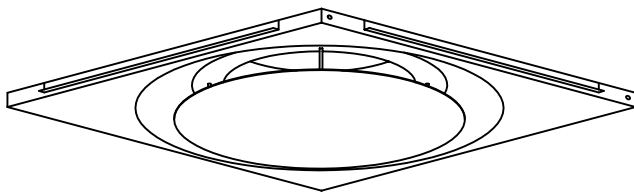


# AIR DISTRIBUTION SUBMITTAL



UNIVERSAL DESIGN IS COMPATIBLE WITH STANDARD 15/16" WIDE CEILING GRID AS WELL AS 9/16" WIDE BOLT SLOT TYPE GRID SYSTEMS.

## PERFORMANCE DATA

		24 X 24 NOMINAL SIZE							
NECK VELOCITY		400	500	600	700	800	1000	1200	1400
6" INLET	CFM	79	98	118	137	157	196	236	275
	Pt	0.016	0.024	0.032	0.042	0.053	0.081	0.117	0.160
	THROW NC	3 (20)	3 (20)	4 (20)	5 (20)	6 (20)	7 (20)	8 (20)	9 (20)
7" INLET	CFM	107	135	159	188	214	267	321	374
	Pt	0.019	0.029	0.041	0.056	0.072	0.112	0.161	0.22
	THROW NC	4 (20)	5 (20)	5 (20)	6 (20)	7 (20)	9 (20)	10 (20)	11 (20)
8" INLET	CFM	140	175	209	244	279	349	419	489
	Pt	0.021	0.035	0.048	0.068	0.089	0.141	0.198	0.256
	THROW NC	5 (20)	6 (20)	7 (20)	8 (20)	9 (20)	10 (20)	11 (20)	13 (20)
9" INLET	CFM	177	224	262	312	354	441	531	618
	Pt	0.023	0.038	0.053	0.076	0.100	0.152	0.218	0.308
	THROW NC	6 (20)	7 (20)	8 (20)	9 (20)	10 (20)	12 (20)	13 (20)	15 (20)
10" INLET	CFM	218	273	327	382	436	545	654	764
	Pt	0.024	0.047	0.070	0.097	0.124	0.195	0.290	0.392
	THROW NC	7 (20)	8 (20)	10 (20)	11 (20)	12 (20)	14 (20)	17 (20)	19 (20)
12" INLET	CFM	314	393	471	550	628	785	942	1100
	Pt	0.042	0.065	0.097	0.134	0.176	0.275	0.391	0.528
	THROW NC	8 (20)	10 (20)	12 (20)	13 (20)	15 (20)	17 (20)	19 (20)	21 (20)

Pt - Total pressure in inches of water.  
 Throw - Distances in feet to a terminal velocity of 50 FPM.  
 NC - Noise Criteria based on 10 db room absorption.  
 Performance is based on tests performed at Donco Air Products and Intertek Testing Services in accordance with ASHRAE 70-1991. Copy of Reports #3071239-001A & 3071240-001 are available upon request.

## FEATURES

- THE ROUND PLAQUE IN A CONICAL PLENUM PROVIDES A TRUE FULL-FACE CIRCULAR OUTLET.
- THE LARGE OUTLET AREA PROVIDES EFFICIENT AIR PERFORMANCE AND A 360 DEGREE AIR PATTERN.
- CENTER PLAQUE IS EASILY REMOVABLE.
- SAFETY CABLE SECURES THE PLAQUE ASSEMBLY
- DIFFUSER HOUSING IS 22 GAGE STEEL.
- HANGER HOLES ARE STANDARD.
- STANDARD FINISH IS DONCO #26 POWDER COAT WHITE.
- NOMINAL SIZE IS 24 X 24.
- DIRECTIONAL AIR GATES ARE AVAILABLE.

## OPTIONS (SPECIFY)

- \_\_\_ INLET SIZE  
 BUTTERFLY DAMPER  
 RADIAL DAMPER

STANDARD INDUSTRY TOLERANCES APPLY. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

JOB NAME: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_  
 ARCHITECT: \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_  
 CONTRACTOR: \_\_\_\_\_

## MODEL TFM ROUND PLAQUE / CONICAL PLENUM LAY-IN DIFFUSER

DRAWN BY: RBJ      DATE: 8-24-05      DWG. NO.: TFM

P.O. BOX 250  
 ALBION, IOWA 50005  
 PH. (641) 488-2211 FAX (641) 488-2796  
 www.raymon-hvac.com



**RAYMON**  
 DONCO AIR DISTRIBUTION EQUIPMENT

# TFM PERFORMANCE DATA

24 X 24 NOMINAL SIZE									
NECK VELOCITY		400	500	600	700	800	1000	1200	1400
6" INLET	CFM	79	98	118	137	157	196	236	275
	Pt	0.016	0.024	0.032	0.042	0.053	0.081	0.117	0.160
	THROW	3	3	4	5	6	7	8	9
	NC	(20)	(20)	(20)	(20)	(20)	21	28	33
7" INLET	CFM	107	135	159	188	214	267	321	374
	Pt	0.019	0.029	0.041	0.056	0.072	0.112	0.161	0.22
	THROW	4	5	5	6	7	9	10	11
	NC	(20)	(20)	(20)	(20)	(20)	24	30	34
8" INLET	CFM	140	175	209	244	279	349	419	489
	Pt	0.021	0.035	0.048	0.068	0.089	0.141	0.198	0.256
	THROW	5	6	7	8	9	10	11	13
	NC	(20)	(20)	(20)	(20)	(20)	25	31	36
9" INLET	CFM	177	224	262	312	354	441	531	618
	Pt	0.023	0.038	0.053	0.076	0.100	0.152	0.218	0.308
	THROW	6	7	8	9	10	12	13	15
	NC	(20)	(20)	(20)	(20)	(20)	26	33	38
10" INLET	CFM	218	273	327	382	436	545	654	764
	Pt	0.024	0.047	0.070	0.097	0.124	0.195	0.290	0.392
	THROW	7	8	10	11	12	14	17	19
	NC	(20)	(20)	(20)	(20)	20	28	33	38
12" INLET	CFM	314	393	471	550	628	785	942	1100
	Pt	0.042	0.065	0.097	0.134	0.176	0.275	0.391	0.528
	THROW	8	10	12	13	15	17	19	21
	NC	(20)	(20)	(20)	(20)	23	30	36	40

Pt - Total pressure in inches of water.

Throw - Distances in feet to a terminal velocity of 50 FPM.

NC - Noise Criteria based on 10 db room absorption.

Performance is based on tests performed at Donco Air Products and Intertek Testing Services in accordance with ASHRAE 70-1991. Copy of Reports #3071239-001A & 3071240-001 are available upon request.

## SUGGESTED SPECIFICATIONS

The architectural round face panel diffusers shall be Raymon-Donco Model TFM. The diffusers shall have a 23" diameter face opening with an 18" diameter deflector plaque mounted 3/8" down from the face. The diffuser housing shall be one piece with a die-formed conical center section. The diffuser housing shall be 22 gage steel with a heavy gage aluminum center panel supported by a rigid frame assembly. The center panel shall be easily removable by means of a concealed threaded support and shall be free of any visible fasteners. Center panel shall include a safety cable to assist in support during maintenance or damper access.

The diffuser shall have a minimum 2-1/2" high beaded inlet collar. The diffuser panel shall be a nominal 24 x 24 and mount flush in either a standard tee or a narrow tee bolt-slot type ceiling grid. The diffuser frame edge shall also be provided with hanger holes for additional support as required. The finish shall be an extra durable powder coating in standard off white. The paint shall have a hardness of 2H+ and shall pass a 1000 hr test in both salt spray ASTM-B117 and humidity ASTM-D2247. The paint shall also pass the reverse impact test ASTM-D2794 with 160 in/lbs impact force.

The diffuser shall be tested in accordance with ASHRAE 70-1991.