

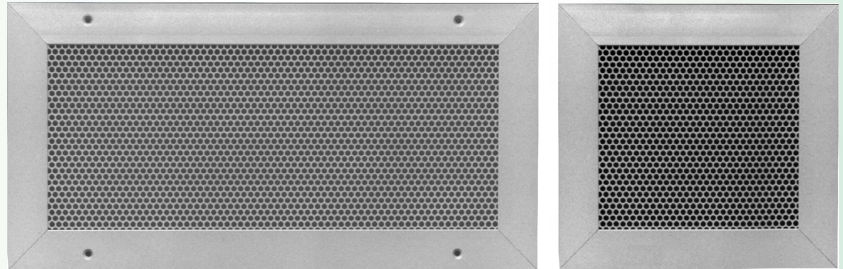
G-TXR



Specialized Grilles | Perforated Return | Description

Perforated Return Grilles

- TXR-A • Aluminum
- TXR-AF • Aluminum Filter Return
- TXR-S • Steel
- TXR-SF • Steel Filter Return
- TXR-SS • 304 Stainless Steel



Models:

- TXR-A • Aluminum
- TXR-AF • Aluminum Filter

Return

- TXR-S • Steel
- TXR-SF • Steel Filter Return
- TXR-SS • 304 Stainless Steel

These Products Include:

- Standard Finish
 - #26 White (TXR-A/ TXR-S, TXR-AF/ TXR-SF)
 - #04 Mill (TXR-SS)
- Available Border Types
 - #1 - Surface Mount (All)
 - #2 - Snap-In (TXR-A)
 - #3 - Lay-In (TXR-A, TXR-S, TXR-SF, TXR-AF)
 - #4 - Spline (TXR-A)
- Countersunk Screw Holes.
- Optional Opposed Blade Damper on Border Type 1.

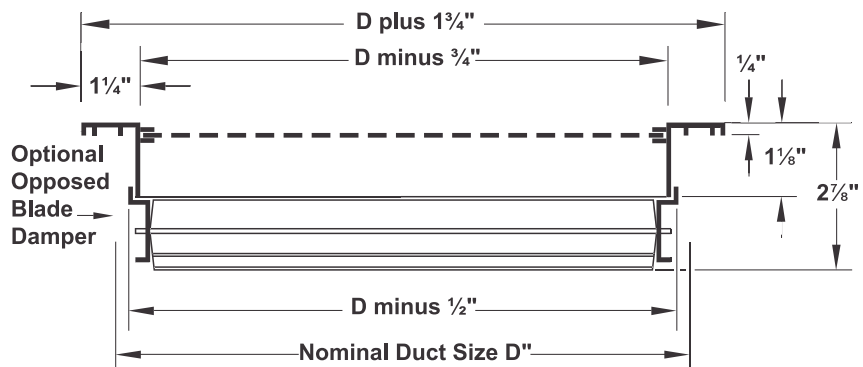
TXR-A, TXR-S, TXR-SS

- Perforated screen with $\frac{3}{16}$ -inch diameter holes on $\frac{1}{4}$ inch staggered centers.
- 51% free area perforated face.
- Matches general appearance of industry standard perforated diffusers.

TXR-AF, TXR-SF

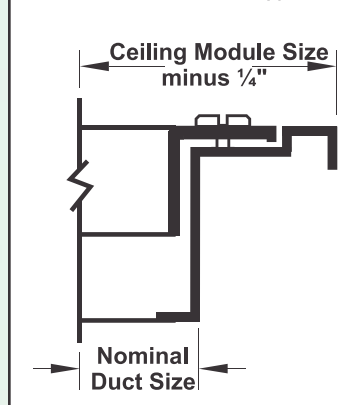
- Available for lay-in or surface mounting applications.
- For use with 1-inch thick filters.
- Perforated screen with $\frac{3}{16}$ -inch diameter holes on $\frac{1}{4}$ inch staggered centers.
- Matches general appearance of industry standard perforated diffusers.

TXR-A, TXR-S • Border Type 1

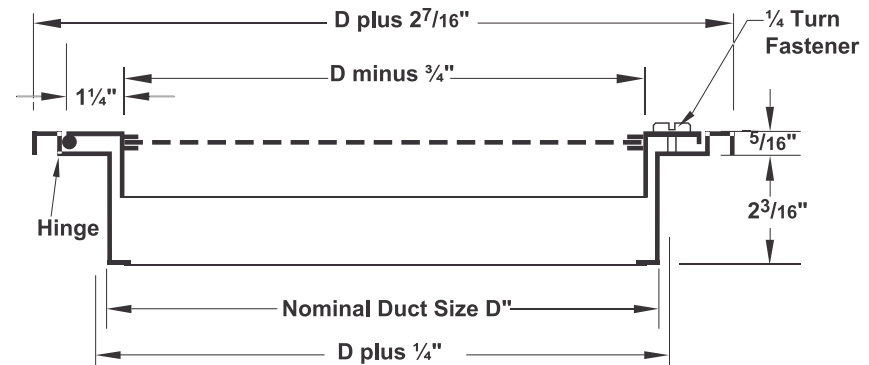


Available sizes (D" x D") Border Type 1 are 6 x 4 inches through 48 x 48 inches in 2-inch increments. Odd and fractional sizes are available at additional cost.

Filter Frame • Border Type 3



TXR-AF, TXR-SF • Border Type 1





Specialized Grilles | Perforated Return | Performance Data

Performance Data

Models: TXR-A, TXR-AF, TXR-S, TXR-SF and TXR-SS
 Performance based on nominal sizes shown in bold.

Nominal Duct Size (in.)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Velocity Pressure Neg. Static Pressure	NC 10				NC 20			NC 30		NC 40
				300 0.010 0.051	400 0.016 0.079	500 0.022 0.114	600 0.031 0.156	700 0.040 0.203	800 0.062 0.318	1000 0.090 0.458	1200 0.122 0.623	1400 0.12 0.62	
6x6	0.25	0.19	Airflow, cfm NC	57 -	76 -	95 -	114 -	133 13	152 16	190 21	228 26	266 30	
8x6	0.33	0.26	Airflow, cfm NC	78 -	104 -	130 -	156 -	182 14	208 17	260 23	312 27	364 31	
10x6	0.42	0.34	Airflow, cfm NC	102 -	136 -	170 -	204 11	238 15	272 18	340 24	408 28	476 32	
8x8	0.44	0.37	Airflow, cfm NC	111 -	148 -	185 -	222 12	259 15	296 19	370 24	444 29	518 33	
12x6	0.5	0.41	Airflow, cfm NC	123 -	164 -	205 -	246 12	287 16	328 19	410 25	492 29	574 33	
14x6	0.58	0.48	Airflow, cfm NC	144 -	192 -	240 -	288 13	336 17	384 20	480 25	576 30	672 34	
16x6 12x8	0.67	0.57	Airflow, cfm NC	171 -	228 -	285 -	342 14	399 17	456 21	570 26	684 31	798 34	
10x10	0.69	0.59	Airflow, cfm NC	177 -	236 -	295 -	354 14	413 18	472 21	590 26	708 31	826 35	
18x6	0.75	0.63	Airflow, cfm NC	189 -	252 -	315 -	378 14	441 18	504 21	630 27	756 31	882 35	
20x6 12x10	0.83	0.72	Airflow, cfm NC	216 -	288 -	360 -	432 15	504 18	576 22	720 27	864 32	1008 35	
22x6	0.92	0.77	Airflow, cfm NC	231 -	308 -	385 -	462 15	539 19	616 22	770 27	924 32	1078 36	
24x6 12x12	1	0.88	Airflow, cfm NC	264 -	352 -	440 11	528 15	616 19	704 23	880 28	1056 32	1232 36	
30x6 18x10	1.25	1.11	Airflow, cfm NC	333 -	444 -	555 12	666 16	777 20	888 24	1110 29	1332 33	1554 37	
14x14	1.36	1.22	Airflow, cfm NC	366 -	488 -	610 12	732 17	854 21	976 24	1220 29	1464 34	1708 38	
36x6 18x12	1.5	1.35	Airflow, cfm NC	405 -	540 -	675 13	810 17	945 21	1080 24	1350 30	1620 34	1890 38	
22x10	1.53	1.37	Airflow, cfm NC	411 -	548 -	685 13	822 17	959 21	1096 24	1370 30	1644 34	1918 38	
30x8 24x10	1.67	1.49	Airflow, cfm NC	447 -	596 -	745 13	894 18	1043 22	1192 25	1490 30	1788 35	2086 39	
42x6 18x14	1.75	1.59	Airflow, cfm NC	477 -	636 -	795 14	954 18	1113 22	1272 25	1590 31	1908 35	2226 39	
16x16	1.78	1.62	Airflow, cfm NC	486 -	648 -	810 14	972 18	1134 22	1296 25	1620 31	1944 35	2268 39	
24x12 18x16	2	1.82	Airflow, cfm NC	546 -	728 -	910 14	1092 19	1274 22	1456 26	1820 31	2184 36	2548 39	
18x18	2.25	2.07	Airflow, cfm NC	621 -	828 -	1035 15	1242 19	1449 23	1656 26	2070 32	2484 36	2898 40	
24x14	2.33	2.14	Airflow, cfm NC	642 -	856 -	1070 15	1284 19	1498 23	1712 26	2140 32	2568 36	2996 40	
30x12	2.5	2.29	Airflow, cfm NC	687 -	916 -	1145 15	1374 20	1603 23	1832 27	2290 32	2748 37	3206 40	
24x16	2.67	2.46	Airflow, cfm NC	738 -	984 -	1230 15	1476 20	1722 24	1968 27	2460 32	2952 37	3444 41	
20x20	2.78	2.57	Airflow, cfm NC	771 -	1028 -	1285 16	1542 20	1799 24	2056 27	2570 33	3084 37	3598 41	
36x12	3	2.75	Airflow, cfm NC	825 -	1100 -	1375 16	1650 20	1925 24	2200 27	2750 33	3300 37	3850 41	
30x16 24x20	3.33	3.11	Airflow, cfm NC	933 -	1244 11	1555 16	1866 21	2177 25	2488 28	3110 33	3732 38	4354 42	
22x22	3.36	3.14	Airflow, cfm NC	942 -	1256 11	1570 17	1884 21	2198 25	2512 28	3140 34	3768 38	4396 42	
42x12 36x14	3.5	3.22	Airflow, cfm NC	966 -	1288 11	1610 17	1932 21	2254 25	2576 28	3220 34	3864 38	4508 42	
24x22	3.67	3.43	Airflow, cfm NC	1029 -	1372 11	1715 17	2058 21	2401 25	2744 28	3430 34	4116 38	4802 42	
30x18	3.75	3.5	Airflow, cfm NC	1050 -	1400 12	1750 17	2100 21	2450 25	2800 29	3500 34	4200 38	4900 42	

• Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006.

• NC based on room absorption of 10dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-2006.



Specialized Grilles | Perforated Return | Performance Data

Performance Data (continued)

Models: TXR-A, TXR-AF, TXR-S, TXR-SF and TXR-SS

Performance based on nominal sizes shown in bold.

Nominal Duct Size (in.)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Velocity Pressure Neg. Static Pressure	NC 10		NC 20			NC 30			NC 40	
				300 0.006 0.029	400 0.010 0.051	500 0.016 0.079	600 0.022 0.114	700 0.031 0.156	800 0.040 0.203	1000 0.062 0.318	1200 0.090 0.458	1400 0.122 0.623	
48x12 24x24	4.00	3.75	Airflow, cfm NC	1125 -	1500 12	1875 17	2250 22	2625 26	3000 29	3750 34	4500 39	5250 43	
36x18	4.50	4.22	Airflow, cfm NC	1266 -	1688 12	2110 18	2532 22	2954 26	3376 29	4220 35	5064 39	5908 43	
36x20 30x24	5.00	4.71	Airflow, cfm NC	1413 -	1884 13	2355 18	2826 23	3297 27	3768 30	4710 35	5652 40	6594 44	
42x18	5.25	4.94	Airflow, cfm NC	1482 -	1976 13	2470 18	2964 23	3458 27	3952 30	4940 36	5928 40	6916 44	
28x28	5.44	5.16	Airflow, cfm NC	1548 -	2064 13	2580 19	3096 23	3612 27	4128 30	5160 36	6192 40	7224 44	
42x20 30x28	5.83	5.51	Airflow, cfm NC	1653 -	2204 13	2755 19	3306 23	3857 27	4408 30	5510 36	6612 40	7714 44	
48x18 36x24	6.00	5.66	Airflow, cfm NC	1698 -	2264 14	2830 19	3396 24	3962 27	4528 31	5660 36	6792 41	7924 44	
30x30	6.25	5.94	Airflow, cfm NC	1782 -	2376 14	2970 19	3564 24	4158 28	4752 31	5940 36	7128 41	8316 45	
42x24 36x28	7.00	6.66	Airflow, cfm NC	1998 -	2664 14	3330 20	3996 24	4662 28	5328 31	6660 37	7992 41	9324 45	
46x22	7.03	6.68	Airflow, cfm NC	2004 -	2672 14	3340 20	4008 24	4676 28	5344 31	6680 37	8016 41	9352 45	
32x32	7.11	6.78	Airflow, cfm NC	2034 -	2712 14	3390 20	4068 24	4746 28	5424 31	6780 37	8136 41	9492 45	
36x30	7.50	7.16	Airflow, cfm NC	2148 -	2864 15	3580 20	4296 25	5012 28	5728 32	7160 37	8592 42	10024 45	
48x24 36x32	8.00	7.63	Airflow, cfm NC	2289 -	3052 15	3815 20	4578 25	5341 29	6104 32	7630 37	9156 42	10682 46	
34x34	8.03	7.68	Airflow, cfm NC	2304 -	3072 15	3840 20	4608 25	5376 29	6144 32	7680 37	9216 42	10752 46	
36x34	8.50	8.14	Airflow, cfm NC	2442 -	3256 15	4070 21	4884 25	5698 29	6512 32	8140 38	9768 42	11396 46	
42x30	8.75	8.38	Airflow, cfm NC	2514 -	3352 15	4190 21	5028 25	5866 29	6704 32	8380 38	10056 42	11732 46	
36x36	9.00	8.63	Airflow, cfm NC	2589 -	3452 15	4315 21	5178 25	6041 29	6904 32	8630 38	10356 42	12082 46	
42x34 48x30	10.00	9.60	Airflow, cfm NC	2880 -	3840 16	4800 21	5760 26	6720 30	7680 33	9600 38	11520 43	13440 47	
38x38	10.03	9.64	Airflow, cfm NC	2892 -	3856 16	4820 21	5784 26	6748 30	7712 33	9640 38	11568 43	13496 47	
42x36	10.50	10.10	Airflow, cfm NC	3030 -	4040 16	5050 22	6060 26	7070 30	8080 33	10100 39	12120 43	14140 47	
46x34	10.86	10.45	Airflow, cfm NC	3135 -	4180 16	5225 22	6270 26	7315 30	8360 33	10450 39	12540 43	14630 47	
42x38	11.08	10.67	Airflow, cfm NC	3201 -	4268 16	5335 22	6402 26	7469 30	8536 33	10670 39	12804 43	14938 47	
40x40	11.11	10.70	Airflow, cfm NC	3210 -	4280 16	5350 22	6420 26	7490 30	8560 33	10700 39	12840 43	14980 47	
48x36	12.00	11.57	Airflow, cfm NC	3471 -	4628 17	5785 22	6942 27	8099 30	9256 34	11570 39	13884 44	16198 47	
42x42	12.25	11.82	Airflow, cfm NC	3546 -	4728 17	5910 22	7092 27	8274 31	9456 34	11820 39	14184 44	16548 48	
44x44	13.44	12.99	Airflow, cfm NC	3897 -	5196 17	6495 23	7794 27	9093 31	10392 34	12990 40	15588 44	18186 48	
48x42	14.00	13.54	Airflow, cfm NC	4062 -	5416 17	6770 23	8124 27	9478 31	10832 34	13540 40	16248 44	18956 48	
46x46	14.69	14.22	Airflow, cfm NC	4266 11	5688 18	7110 23	8532 28	9954 31	11376 35	14220 40	17064 45	19908 48	
48x46	15.33	14.85	Airflow, cfm NC	4455 11	5940 18	7425 23	8910 28	10395 32	11880 35	14850 40	17820 45	20790 49	
48x48	16.00	15.50	Airflow, cfm NC	4650 11	6200 18	7750 23	9300 28	10850 32	12400 35	15500 40	18600 45	21700 49	

• Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006.

• NC based on room absorption of 10dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-2006.



Specialized Grilles | Perforated Return | Specifications

Suggested Division 15 Specifications

Perforated Return Grilles

Models:


TXR-S / TXR-A / TXR-SS

Perforated Filter Return Grille Models:

TXR-SF / TXR-AF


TXR-S • Steel

TXR-SF • Steel with Filter Frame

Return filter grilles shall be  Model TXR-S or TXR-SF for the sizes and mounting types as shown on the plans and outlet schedule. The face and border shall be constructed of perforated steel with 3/16-inch diameter holes on 1/4 inch staggered centers to provide 51 percent free area. Outer borders shall be 1 1/4 inches wide. Corners shall be assembled with full penetration resistance welds with a reinforcing patch for extra strength. Screw holes shall be countersunk for a neat appearance. For Model 8RF: Grille shall be provided with a filter frame for a standard 1-inch filter to fit the specified duct size.


TXR-A • Aluminum

TXR-AF • Aluminum with Filter Frame

Return filter grilles shall be  Model TXR-A or TXR-AF for the sizes and mounting types as shown on the plans and outlet schedule. The face shall be constructed of perforated aluminum with 3/16 -inch diameter holes on 1/4-inch staggered centers to provide 51 percent free area. Outer borders shall be constructed of heavy extruded aluminum with a thickness of 0.040-0.050 inch and shall have countersunk screw holes for a neat appearance. Border width shall be 1 1/4 inches on all sides and shall be interlocked at the four corners and mechanically staked to

form a rigid frame. For Model TXR-AF Grille shall be provided with a filter frame for a standard 1-inch filter to fit the specified duct size.

TXR-SS • 304 Stainless Steel



Return filter grilles shall be  Model TXR-SS for the sizes and mounting types as shown on the plans and outlet schedule. The face and border shall be constructed of 304 stainless steel with 3/16-inch diameter holes on 1/4-inch staggered centers to provide 51 percent free area. Outer borders shall be 1 3/16 inches wide. Corners shall be assembled with full penetration resistance welds with a reinforcing patch for extra strength. Screw holes shall be countersunk for a neat appearance.

Finish and Performance Specifications

The grille finish shall be #26 white for TXR-S, TXR-SF, TXR-A and TXR-AF. The finish shall be an anodic acrylic paint, baked at 315° F for 30 minutes. The pencil hardness must be HB to H. The paint must pass a 100-hour ASTM B117 Corrosive Environments Salt Spray Test without creepage, blistering or deterioration of film. The paint must pass a 250-hour ASTM D870 Water Immersion Test. The paint must also pass the ASTM D2794 Reverse Impact Cracking Test with a 50-inch pound force applied.

The manufacturer shall provide published performance data for the grille. The grille shall be tested in accordance with ANSI/ASHRAE Standard 70-2006.

Model Number Specification

Model		Width		Border Type		Optional Damper (note)		
TXR-S	Steel		Surface Mount	White (std.)	26	Steel	AG-15	XXX
TXR-A	Aluminum					Aluminum	AG-15-AA	
TXR-SS	304 Stainless Steel					Stainless Steel	AG-15-SS	
XXX	F	X	X	1	XX	XX-XX-XX		
Filter Frame (optional)		Height 		Mill (Stainless Steel only)		Steel Plaster Frame		PFA
						Aluminum Plaster Frame		PFS
						Stainless Steel Plaster Frame		Optional

Note: 8SS not available with filter frame.