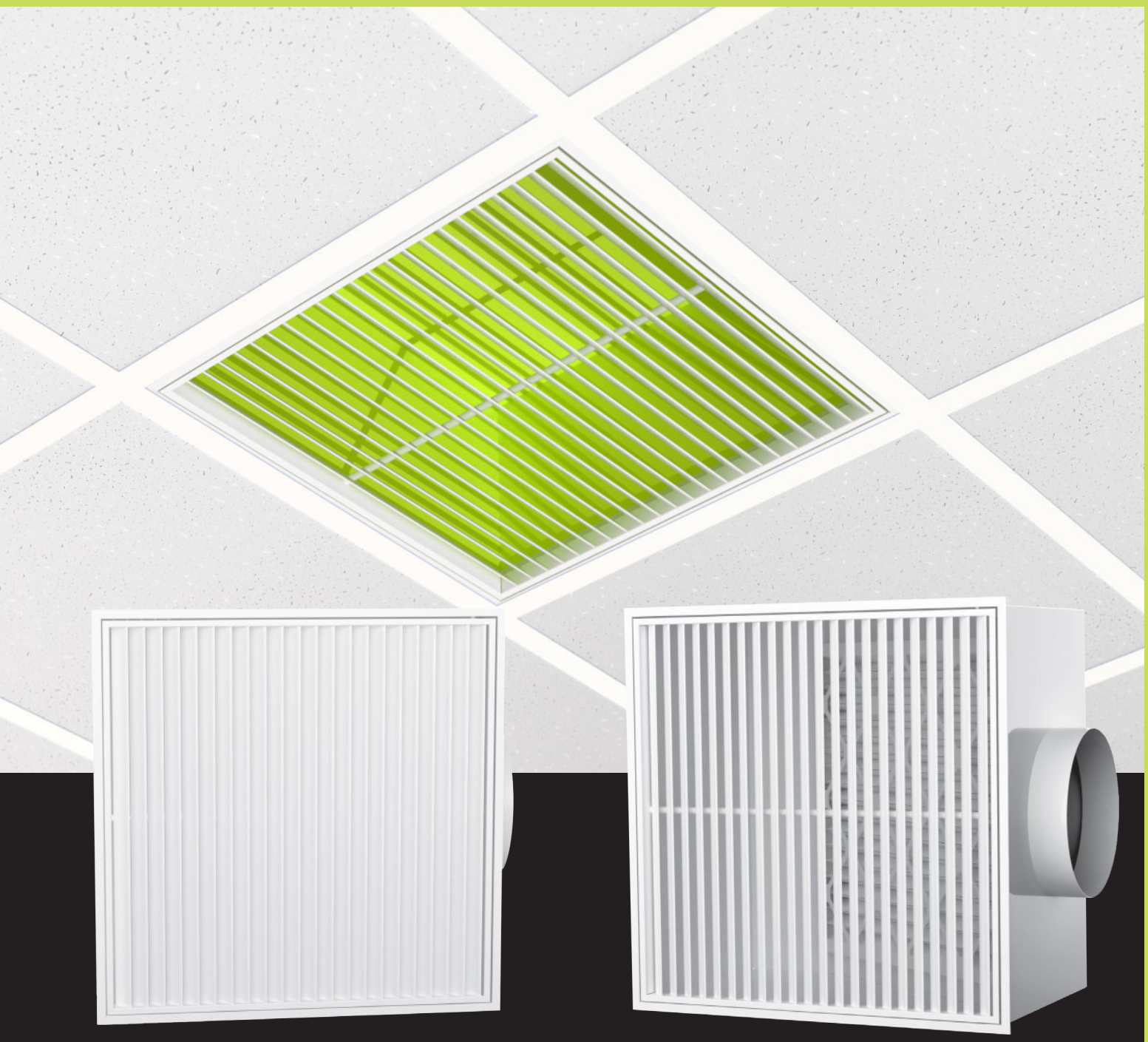


YIN / FLYIN

Architectural Ceiling Returns

EFFECTIV®

October 14 2025

YIN/FLYIN SERIES
Architectural Ceiling Returns

- Duct connection is completely invisible
- FLYIN includes a very discreet filter, invisible from most angles
- Available with inside color matching face, or with a different RAL color
- Easy to use and secure removable hinged face with magnetic locks
- Available with R6 thermal insulation
- Works with all types of ceilings
- Heavy-gauge steel and aluminum construction

YIN

Imperial Dim	Metric Dim	Free Area (sqf)	Max cfm
24” x 24”	610 x 610 mm	2.357	1800

YIN and FLYIN Architectural Ceiling Returns combine discretion and efficiency in order to answer the needs of both architects and engineers.

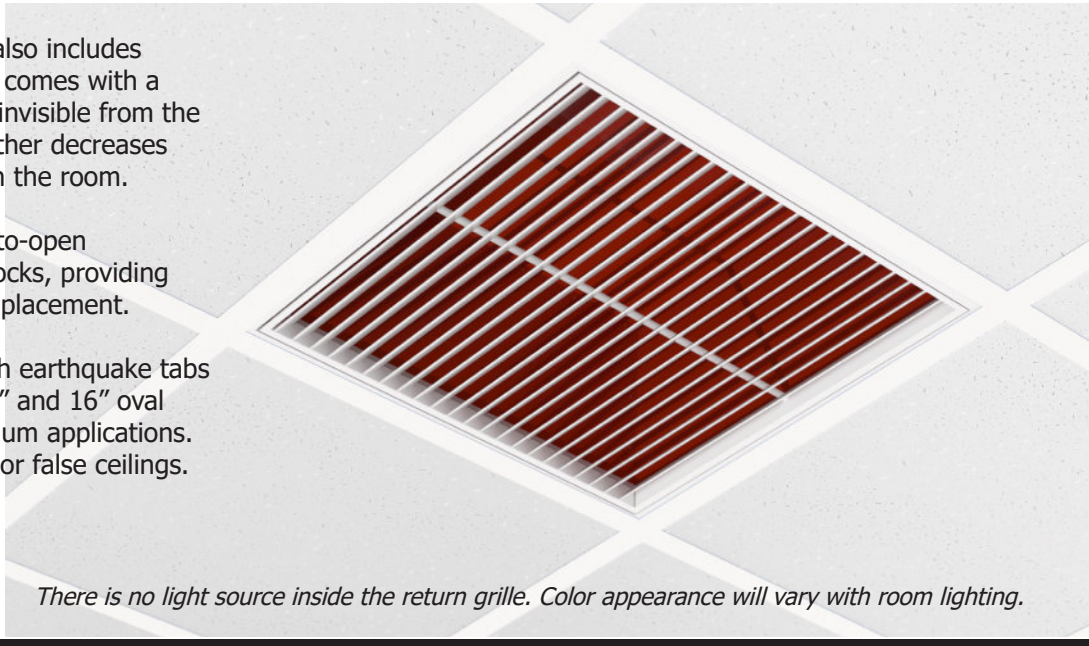
In order to exhaust the air effectively and quietly, ceiling returns must be designed with the largest unobstructed opening possible. This, however, comes with the unappealing result of seeing the rigid metal or flexible duct connection behind the face.

The YIN and FLYIN Architectural Ceiling Returns solve the appearance problem without compromising on efficiency. Powder coated with either the same or different color for the face and on the inside, both architectural returns use a 45-degree angled blades return grille face. This angled blade feature allows visibility to the painted wall opposite to the duct connection. The result is a discreet look hiding the duct from every visible angle and a return grille that blends in with its environment. YIN and FLYIN Architectural Returns can either blend discreetly with the ceiling when using the standard white-on-white finish, or add depth to the ceiling with a white face and an interior color matching a dominant color in the room.

FLYIN Architectural Filter Return Grille also includes a support for 20” x 20” x 2” filters, and comes with a MERV-9 filter. Although not completely invisible from the face, the filter is set in a way which further decreases the angles from where it can be seen in the room.

Both products have a secure and easy-to-open removable hinged face with magnetic locks, providing easy access for cleaning and/or filter replacement.

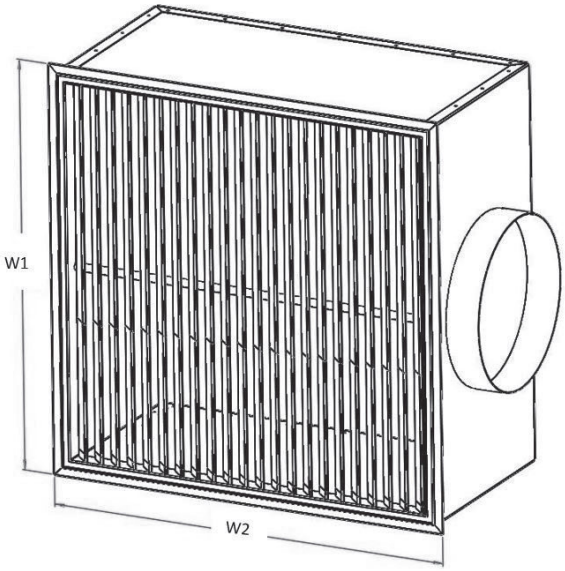
YIN and FLYIN both come standard with earthquake tabs and are available with 10” round, or 12” and 16” oval collars, or without collar for ceiling plenum applications. They are compatible with open, closed or false ceilings.

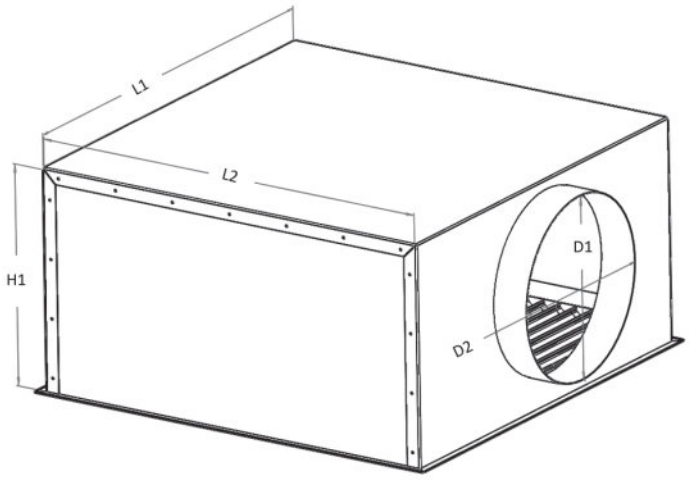


There is no light source inside the return grille. Color appearance will vary with room lighting.

Dimensions - Ducted Returns

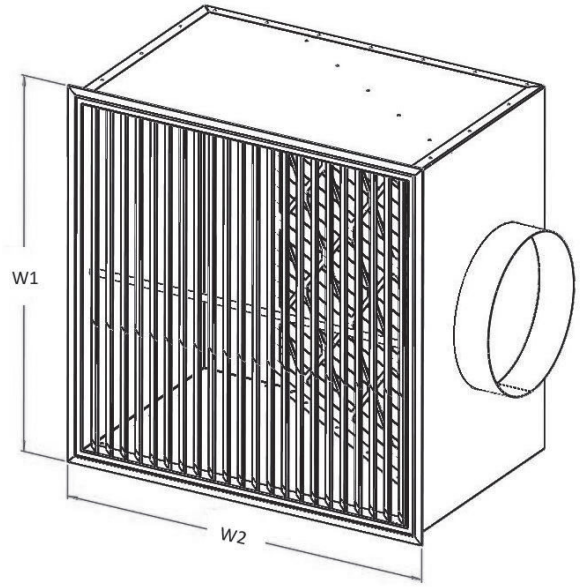
YIN

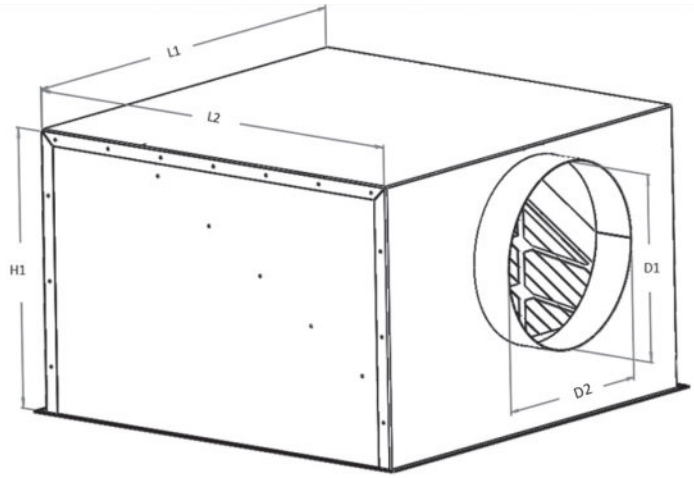




Model	W1	W2	L1	L2	H1	D1	D2
YIN 2410	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	11″ 7/8	9″ 7/8	9″ 7/8
YIN 2412	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	11″ 7/8	7″ 7/8	15″ 7/8
YIN 2416	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	11″ 7/8	9″ 7/8	21″ 7/8

FLYIN

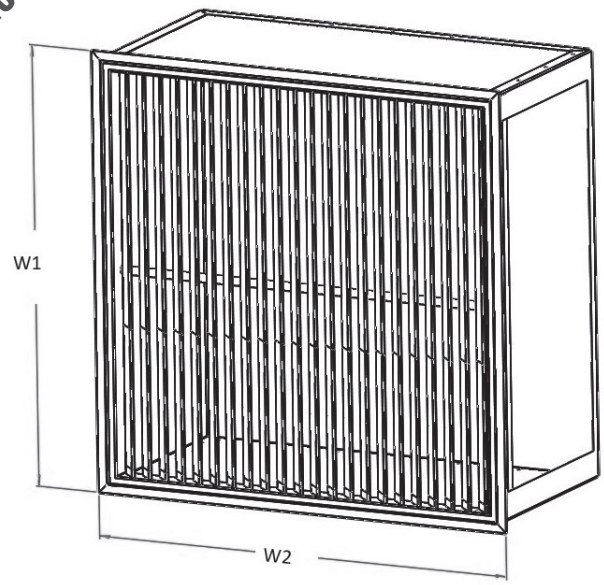


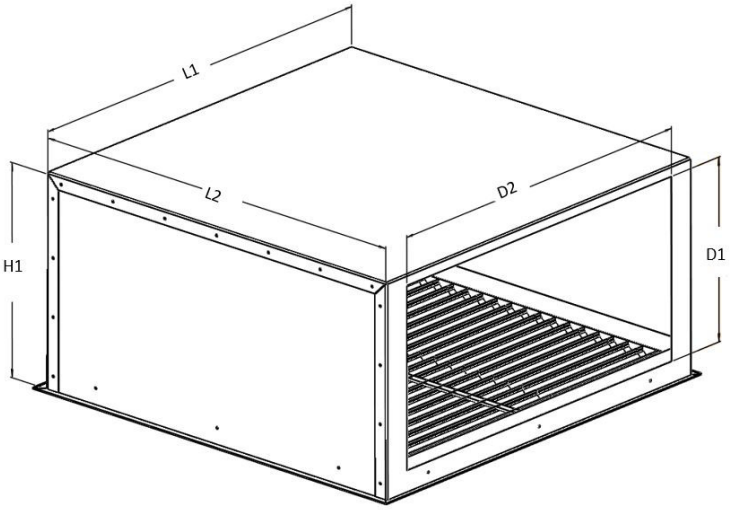


Model	W1	W2	L1	L2	H1	D1	D2
FLYIN 2410	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	14″ 7/8	9″ 7/8	9″ 7/8
FLYIN 2412	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	14″ 7/8	7″ 7/8	15″ 7/8
FLYIN 2416	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	14″ 7/8	9″ 7/8	21″ 7/8

Dimensions - Non Ducted Returns for Ceiling Plenum

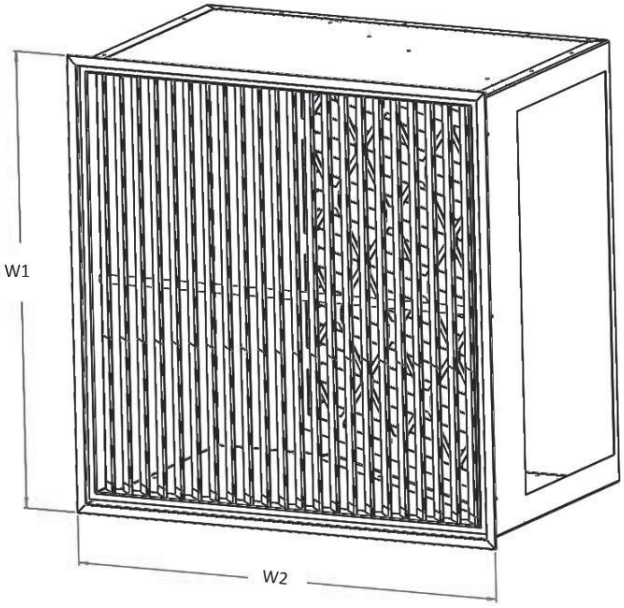
YIN 2400

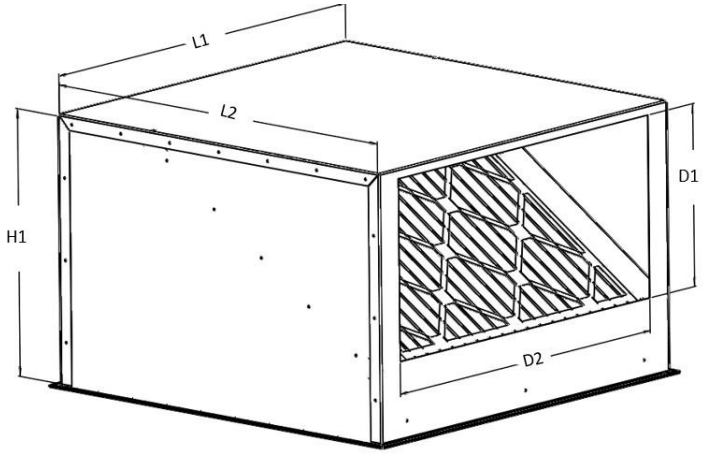




Model	W1	W2	L1	L2	H1	D1	D2
YIN 2400	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	11″ 7/8	10″	20″

FLYIN 2400





Model	W1	W2	L1	L2	H1	D1	D2
FLYIN 2400	23″ 7/8	23″ 7/8	22″ 7/8	22″ 15/16	14″ 7/8	10″	20″

YIN Performance Data

CFM	300	400	500	600	800	1000	1200	1400	1600	1800
NC	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 20	< 20	< 25
Pressure Loss (in.w.g.)	0.002	0.003	0.004	0.006	0.01	0.015	0.021	0.03	0.037	0.045

Performance Notes

- NC Value based on 10 db room attenuation.

FLYIN Performance Data

For FLYIN use the same performance data as YIN and add filter pressure drop.

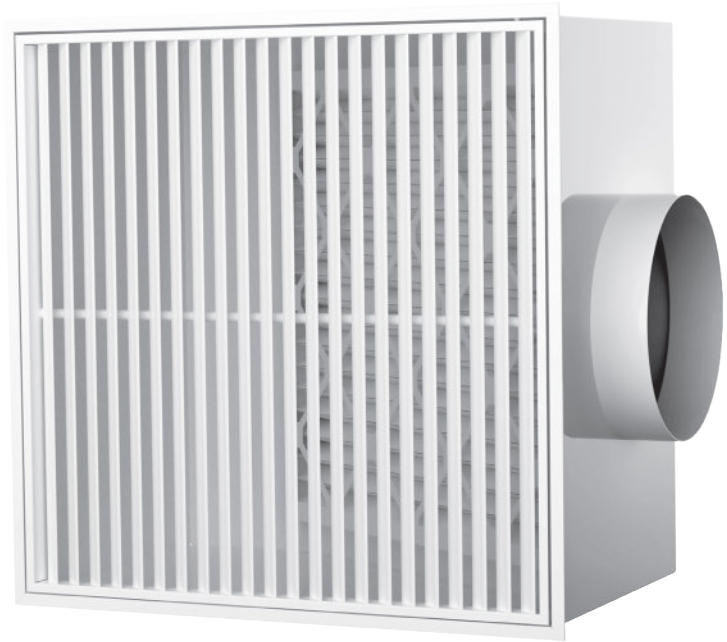
Below is the initial pressure drop table for EffectiV HVAC's standard MERV-9 filter, also used in UV Diffusers. Filters from other manufacturers will have different performance, please use your filter manufacturer's performance data.

CFM	492	984	1476	1968
Initial Pressure Loss (in.w.g.)	0.021	0.063	0.125	0.208

The Pressure Drop vs. Dust Fed table below indicates EffectiV HVAC's MERV-9 filter capacity to perform while retaining dust.

Dust Fed (g)	0	135.3	178.3	204.5	217.2
Pressure Loss (in.w.g.) @ 1968 cfm	0.208	0.531	0.854	1.177	1.500

Final Resistance at 1968 cfm = 1.5 **in.w.g.**



FLYIN

How to Specify YIN

Supply and mounting of YIN Architectural Ceiling Return. Dimension 24x24 inches. Constructed from galvanized steel plenum and aluminum 45-degree blades return grille face. The hinged face is removable and secured by magnetic locks. The side duct connection is completely hidden and invisible from the face. Powder coated with the same or different color on the inside and on the outside. Plenum must have earthquake tabs to secure the product to the building structure. By EffectiV HVAC Inc.

How to Specify FLYIN

Supply and mounting of FLYIN Architectural Ceiling Filter Return. Dimension 24x24 inches. Constructed from galvanized steel plenum and aluminum 45-degree blades return grille face. The hinged face is removable and secured by magnetic locks. The side duct connection is completely hidden and invisible from the face. The 2" filter is secured by 4 spring clips and positioned in a way to minimize its visibility from the face. Powder coated with the same or different color on the inside and on the outside. Plenum must have earthquake tabs to secure the product to the building structure. Shall be supplied 2" MERV-9 filter. By EffectiV HVAC Inc.

How to Order YIN/FLYIN Series

FLYIN	-IR6	-IW	2410	/M9016		
				Face Color	**M9016**	Face in standard white M9016
					RAL	Face in custom RAL color
			Dimension		**2400**	20" x 10" rectangular opening, no collar
					2410	10" round collar
					2412	12" oval collar
					2416	16" oval collar
		Interior Color			**IW**	Interior in standard white M9016
					IRxxxx	Interior in custom RAL color
	Insulation				**IR6**	R6 Thermal Insulation
Model					**YIN**	Return
					FLYIN	Filter Return

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