

RSPA41 - Grille
RSPA42 - Grille with Fire Damper



Meets NIC requirements for Suicide Prevention and approved by the New York State Office of Mental Health.

Application

The RSPA41 group is used in security applications where there is concern that the occupant may attempt suicide. The double-bend louvers overlap to provide a core which makes it difficult to pass string or wire through. **This is not a substitute for proper security practices.** Because of the core design, access to a balancing damper is not possible, and so all balancing should be done via a duct-mounted damper.

Standard Features

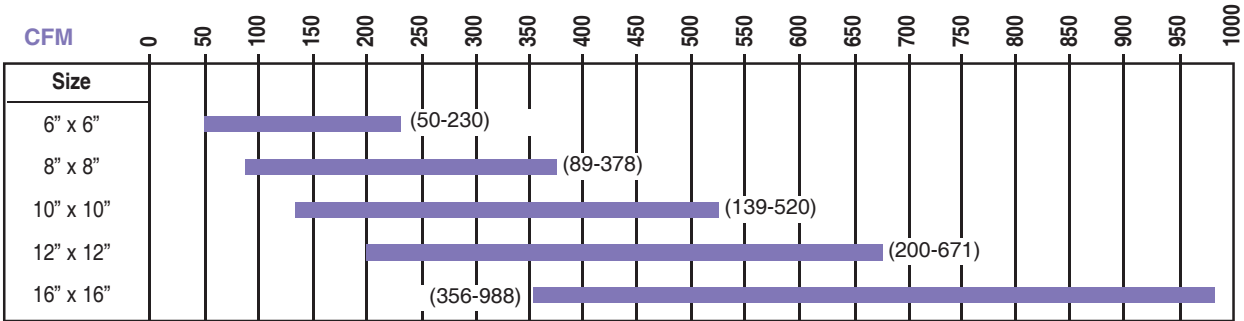
- Face and sleeve are 12 gauge hot-rolled steel.
- Core has 12 gauge hot-rolled steel louvers, which are formed at two 90° angles, and placed on 3/8" centers.
- 1-1/2" x 1-1/2" x 1/8" wall angles are provided as standard, in four loose pieces for field welding.
- Standard finish is electrocoat acrylic baked enamel.
- Standard color is #11 bright white.
- Minimum wall depth for RSPA42 is 8", to conform to UL listing.

Optional Features

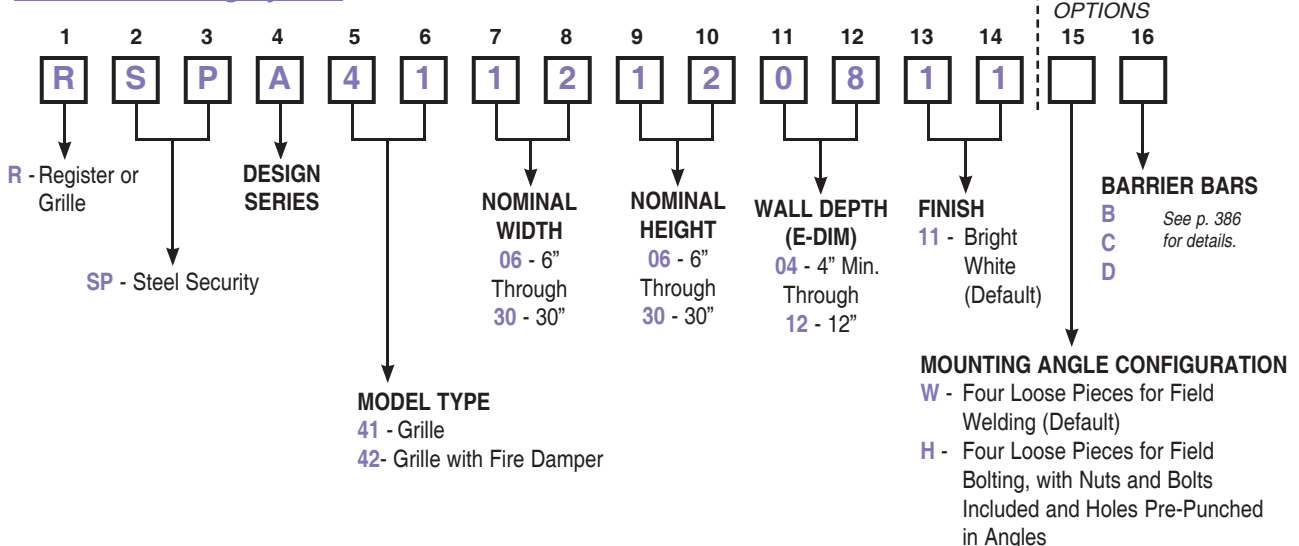
- When specified, Option "H" provides the wall angles in four loose pieces for field bolting, with mounting holes pre-punched in the angles, and security nuts and bolts provided.
- Stainless steel construction available upon request. Please contact factory for pricing and availability.

Quick Select Chart

This shows units with: • A maximum NC/RC of 35.
• A minimum duct velocity of 200 FPM.

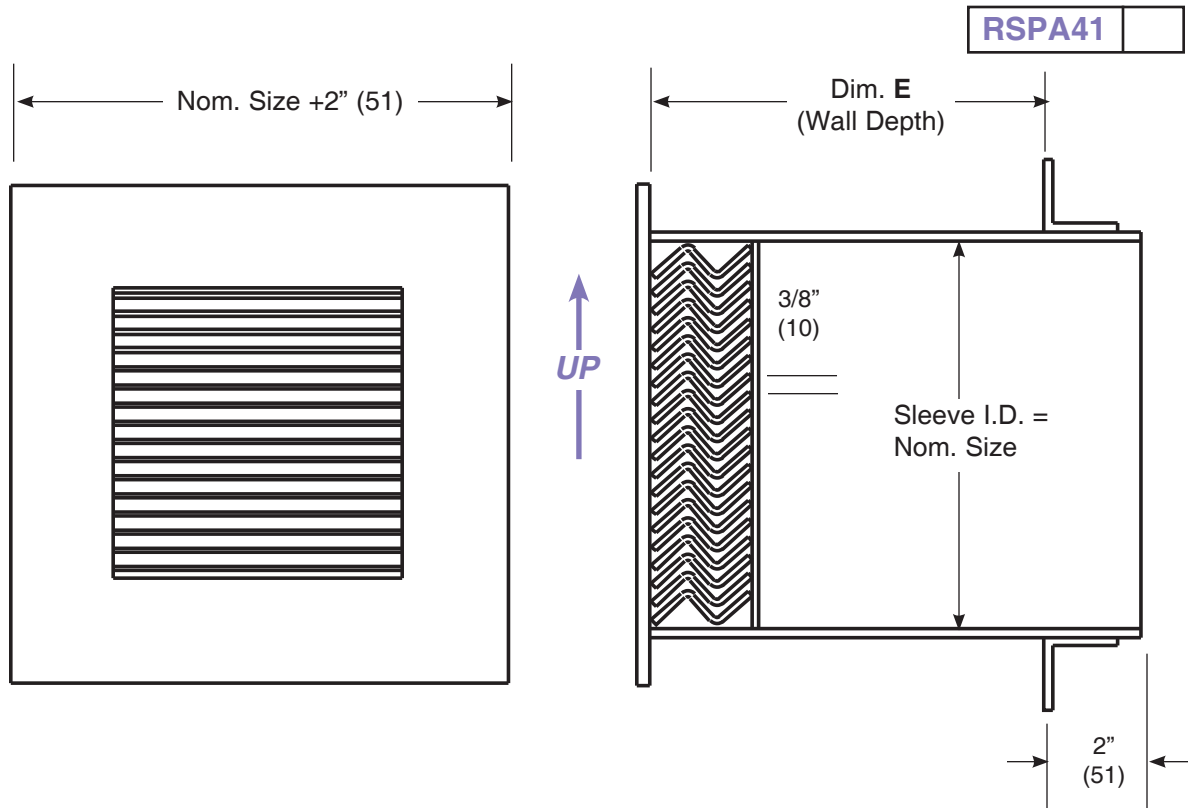


Model Numbering System



RSPA41 - Grille

RSPA42 - Grille with Fire Damper

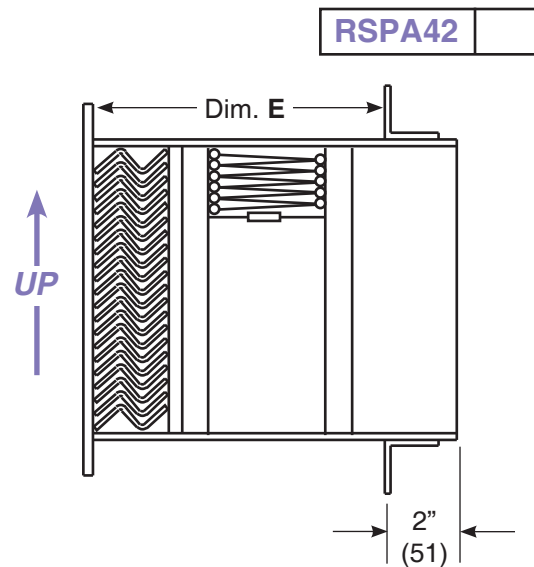


Notes:

- Recommended wall opening size is listed size plus 3/4" (19).
- Metric dimensions are given in millimeters.
- Because of the special application for this product, there is a definite "up" when mounting this is a side wall.
- Fire damper on model RSPA42 is UL555 classified with 1-1/2 hour rating.
- Fire damper is dynamic wall mount style as shown.
- Minimum wall thickness for RSPA42 is 8" (203) to conform to UL requirements.

Notes on Construction:

1. Sleeve and Face are constructed of 12 gauge hot rolled steel.
2. Wall Angles are 1-1/2" x 1-1/2" x 1/8" (38 x 38 x 3) hot rolled steel. They are shipped in 4 pieces for field welding.
3. Core consists of:
 - 12 Gauge hot rolled steel louvers formed with 90° angles to created a "Z" shape.
 - Louvers are installed on 3/8" (10) centers, which provide a labyrinth to deter passage of a rope, twine or string.



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Nom. Size	Nom. Area (ft²)	Duct Velocity Velocity Press. Total Press.	200 0.003 0.036	300 0.006 0.081	400 0.010 0.142	500 0.016 0.219	600 0.022 0.314	700 0.031 0.424	800 0.040 0.556	900 0.051 0.600
6" x 6"	.25	Flow, cfm	50	75	100	125	150	175	200	225
		Throw, ft.	10	13	15	16	17	18	19	20
		NC/RC	10 / - -	12/12N	15/15H	18/18H	21/21H	25/25H	29/29H	33/32H
8" x 8"	.44	Flow, cfm	89	133	178	222	267	311	356	400
		Throw, ft.	11	16	18	20	21	22	23	25
		NC/RC	10 / - -	13/12N	16/16H	20/20H	24/24H	28/27H	33/33H	37/36H
10" x 10"	.69	Flow, cfm	139	208	278	347	417	486	556	625
		Throw, ft.	12	19	22	24	25	27	28	29
		NC/RC	11/10N	14/15N	18/18H	22/22H	27/27H	32/32H	38/37H	43/42H
12" x 12"	1.00	Flow, cfm	200	300	400	500	600	700	800	900
		Throw, ft.	14	23	26	28	30	31	33	34
		NC/RC	11/11N	15/15H	19/19H	25/25H	30/30H	37/37H	44/44H	51/50H
14" x 14"	1.36	Flow, cfm	272	408	544	681	817	952	1088	1224
		Throw, ft.	18	28	31	33	35	37	39	40
		NC/RC	12/11N	16/16H	21/20H	28/28H	35/35H	42/42H	51/51H	60/59H
16" x 16"	1.78	Flow, cfm	356	533	711	889	1067	1244	1422	1600
		Throw, ft.	23	33	36	39	41	43	44	46
		NC/RC	12/12N	17/17H	23/23H	30/30H	39/38H	48/48H	58/58H	69/68H
18" x 18"	2.25	Flow, cfm	450	675	900	1125	1350	1575	1800	2025
		Throw, ft.	29	39	42	45	47	49	51	53
		NC/RC	13/12N	18/18H	25/25H	33/33H	43/43H	53/53H	65/64H	79/78H

Notes on Performance Data

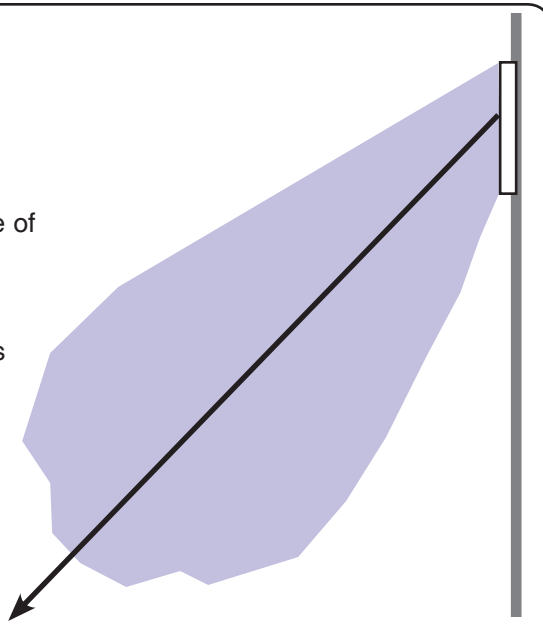
- Performance data is based on tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.
- Sound level values are based on a room absorption of 10db re 10⁻¹² watts.
- A “—” indicates an NC or RC value of less than 10.

Units of Measure Used

- Velocity is given in Feet per Minute (fpm).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw is given in feet to a terminal velocity of 50 fpm.
- Sound Data is given in both Noise Criteria (NC) and room criteria (RC). NC is first with RC second, separated by a slash.

Notes on the Throw:

- Because of the unique shape of the louvers, when used as a supply grille the standard (and fixed) discharge angle is 45°. The throw data provided above is measured along a 45° angle relative to the face of the grille.
- Care should be taken in placement of the grille and placement of the furniture in the occupied space so as to prevent excessive draft in the occupied zone.



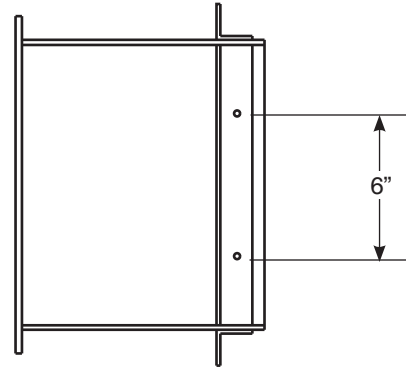
Option “H” - Mounting Angles for Field Bolting onto Wall R&G

Application

The RSPA 51 group is used in security applications where there is a concern that the occupant may attempt suicide. The 3/16” perforated hole pattern is designed to deter passage of any string through the face and back. This hole pattern also prevents any chance to hide contraband. This is not a substitute for proper security practices. Because of the perforated hole pattern, the opposed blade damper needs to be accessed from the back side.

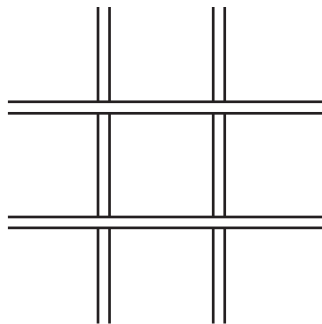
Features

- Mounting angles are provided with holes punched on 6” centers.
- There are a minimum of 2 holes per mounting angle.
- The bolts provided are #1/4-20 x 1” snake-eyes head.
- The nuts provided are 1/4-20 self-locking hex nuts.

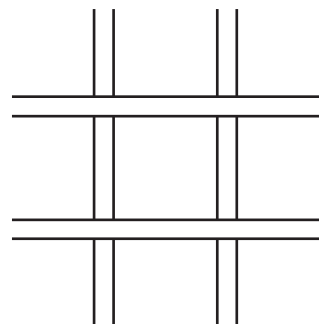


Barrier Bar Options

Option B - 1/2” round bar on 6” centers.



Option C - 3/4” round bar on 6” centers.



Option D - 3/4” round bar vertical on 6” centers through horizontal bars (3/8” x 2-1/2”) on 12” centers. All intersections are welded.

