

CPMS – Maximum Security Diffuser

Model: CPMS

The Holyoake Series CPMS Perforated Maximum Security Diffuser has been designed specifically for maximum security prisons. The diffuser has been tested to meet grade 2 requirements of American corrections standard ASTM F2542 (Standard test methods for physical assault on ventilation grilles for detention and correctional facilities).

- BRANZ Type Test ST1068-TT
Summary available on request or at:
<https://www.branz.co.nz/appraisal-codemark-certificates/>
(Certified for grade 2 requirements)



*Test certification is only available for the 200mm size.

The CPMS is manufactured from Stainless Steel Type 304, for easy wash down. The single piece faceplate ensures no pryable edges and a seamless finish when installed. Coupled with the small 2 mm diameter holes, the Holyoake CPMS has all the attributes that maximum security prisons require.

Construction

The Series CPMS comprises of a 1.8 mm thick perforated stainless steel face plate welded to the duct portion of the diffuser. Two high strength 20mm K700 Bohler bars are securely welded to the duct as required by corrections. M8 threaded rods attached to the faceplate are fastened to the 3mm stainless steel mounting.

Installation

- The rear mounting frame is fastened on the back of the ceiling/wall with appropriate fixings, 10mm holes are provided in the base of the mounting frame for this purpose.
- The CPMS diffuser is securely fitted by clamping the diffuser into the ceiling/wall between the front face and the rear mounting frame via the M8 threaded rods, supplied with the product.
- After the diffuser is securely clamped in place, M8 x 20 bolts are to be fitted through the mounting frame and into the duct portion of the diffuser. 8mm holes in the neck of the mounting frame provide a guide for drilling. All on site fixings are to be provided by the installer.

Features

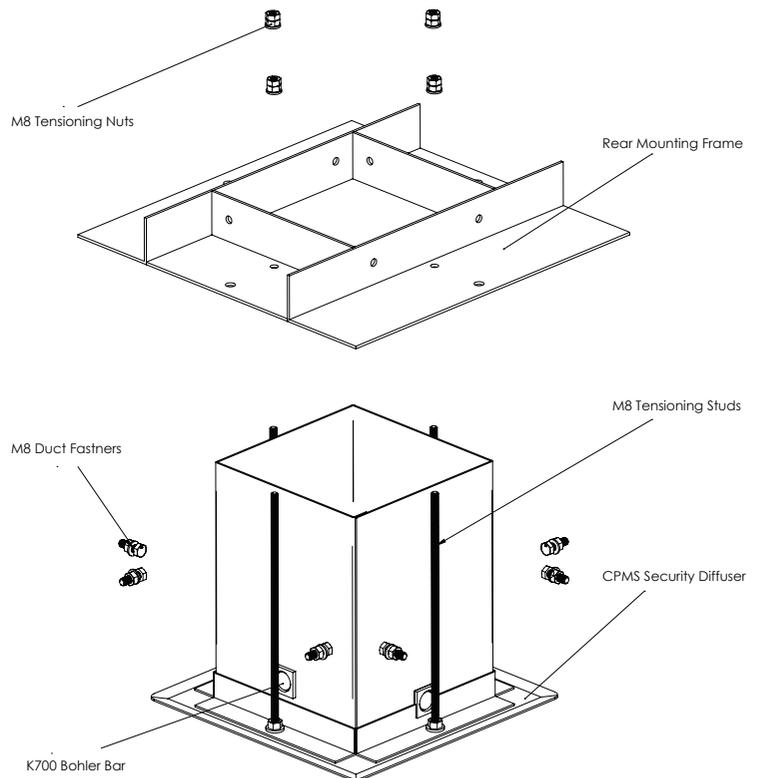
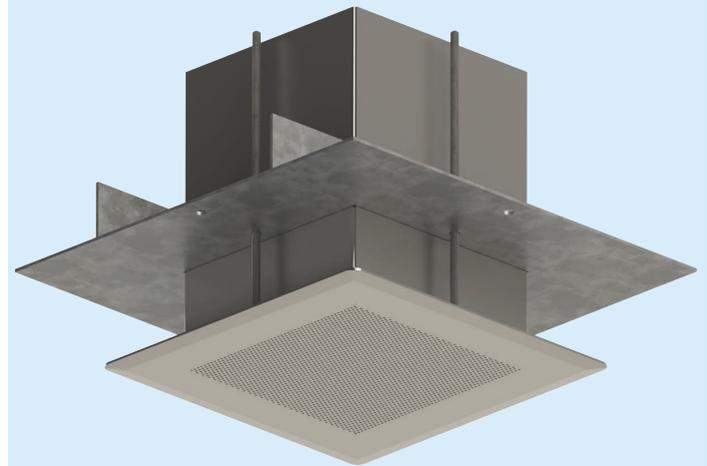
- Heavy duty construction for maximum security prisons.
- 3mm Stainless Steel Mounting frame supplied with all required holes for installation.
- 1.8 mm thick perforated stainless steel diffusion plate.
- One piece construction face plate provides a seamless finish.
- 2 mm diameter holes with 22% free area.

Finish

304 grade stainless steel Mill finish.

Note: This product range is expanding at the time of print, please contact your local Holyoake branch for current sizes.

CPMS- Ceiling Perforated Maximum Security

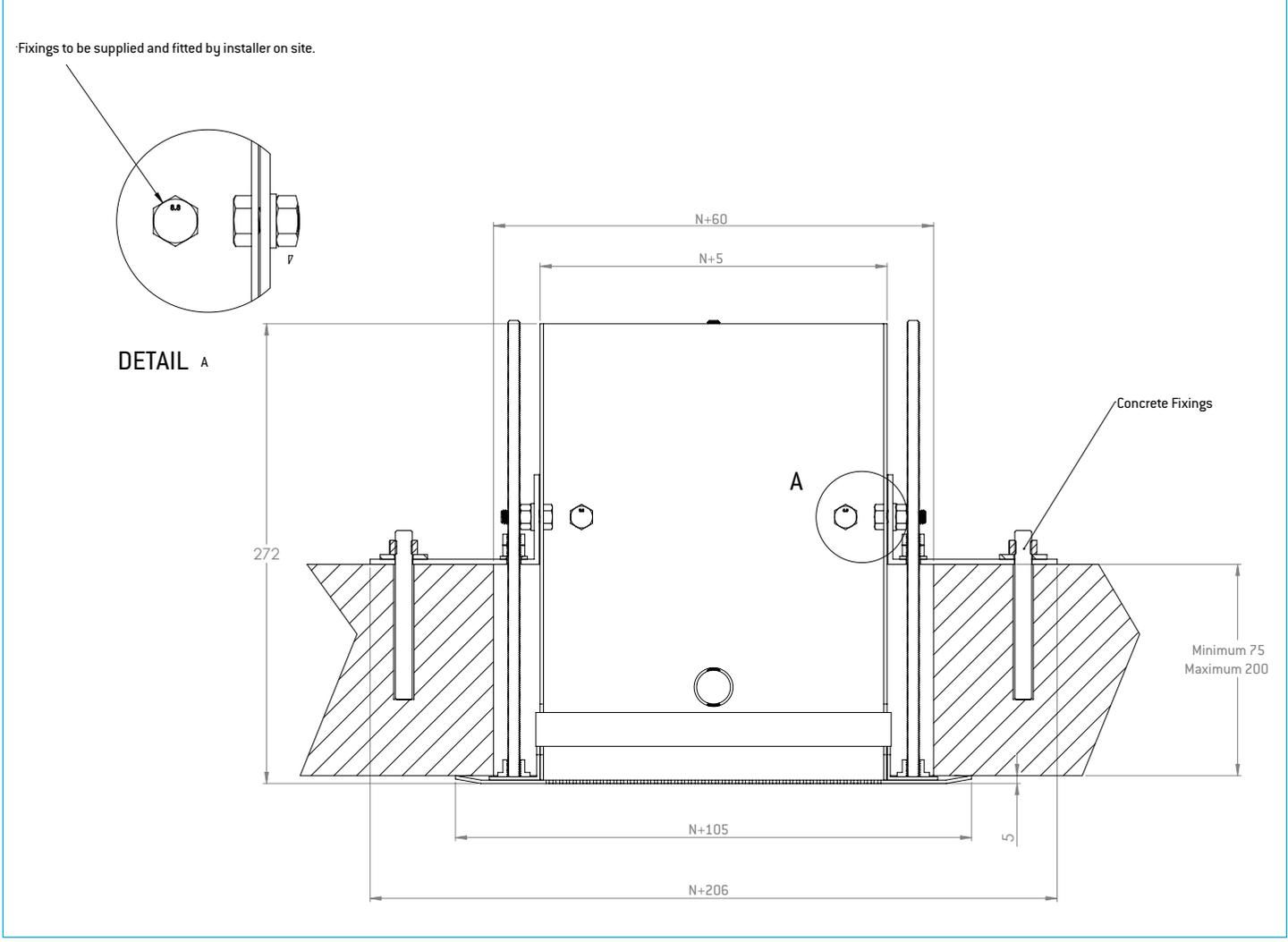


Guide Product Weights		
Description	Neck Size	Approximate Weight in Kg.
CPMS 200	200 x 200	12
CPMS 250	250 x 250	14

Neck (mm)	Flowrate (l/s)	25	50	75	100	150	200	250	300	400	500	600	700	800
200 x 200	Vel (m/s)	0.6	1.3	1.9	2.5	3.8	5							
	Supply ΔP (Pa)	6	27	60	108	158	260							
	Return Neg ΔP (Pa)	10	16	48	86	139	238							
	NC	22	22	23	23	24	24							
250 x 250	Vel (m/s)	0.4	0.8	1.2	1.6	2.4	3.2	4	4.8					
	Supply ΔP (Pa)	4	12	31	50	88	129	179	240					
	Return Neg ΔP (Pa)	6	11	23	37	69	109	159	219					
	NC	21	21	22	22	23	23	24	23					

Performance Notes

1. Vel (m/s) is the duct velocity.
2. Seismic restraints may be required, but not supplied.



CPR, CPS, CPMS, CPSHS, CPSS, CPT & CPTR

Product Ordering Key and Suggested Specifications

CPS CPR	–	600 x 600	–	300 x 300/300 DIA	–	OPTIONS	–	ACCESSORIES	–	FINISH
Ceiling Perforated Supply. Ceiling Perforated Return.		Plenum Adaptor Size (Ceiling Opening).		Nominal Neck Size/ Nominal Neck Diameter.		OBD-2 Opposed Blade Damper / Heavy Gauge Galvanised Perforated Plate.		SRA 300 x 300/ 250 DIA. Square to Round Adaptor.		Holyoake White. Powder Coat.
<p>Ceiling Perforated diffusers shall be Holyoake Series CPS, or CPR and shall consist of an extruded aluminium frame with close mitred corners and 0.75 mm aluminium perforated face in an extruded aluminium sub-frame. The face shall be removable, by means of a separate mounting frame, which if used for supply air shall be furnished with field adjustable pattern control louvers and a galvanised steel plenum with duct connection. All shall be as manufactured by Holyoake.</p>										

CPMS	–	200 x 200	–	FINISH
Ceiling Perforated Maximum Security.		Neck Size.		304 Stainless Steel Mill
<p>Ceiling Perforated Maximum Security Grilles (CPMS) shall be constructed of Stainless Steel type 304 for easy wash down. The faceplate shall be constructed from a single piece with 2mm holes, with no ledges or face fixings. They shall be tested to ASTM F254 and meet a minimum grade 2 rating. All shall be as manufactured by Holyoake.</p>				

CPSHS	–	200 x 200	–	FINISH
Ceiling Perforated Supply High Secure.		Neck Size.		304 Grade Stainless Steel Mill Finish.
<p>Ceiling Perforated Supply High Secure diffusers shall be Holyoake Series CPSHS. These shall be constructed from a single piece of Stainless Steel 304 Grade face plate, with small 2mm diameter holes, with no ledges, or face fixings. Complete with a long welded neck sleeve for full floor penetration and neck clamping flanges, ensuring no face fixings are required. All shall be as manufactured by Holyoake.</p>				

CPSS	–	600 x 600	–	2 3	–	ACCESSORIES	–	FINISH
Ceiling Perforated Supply Secure.		Nominal Neck Size.		Perforated Hole Size and Plate Thickness.		SSA, SRA & RRA Neck Adaptors, Premi-Aire™, or Galvanised Cushion Head Boxes.		Holyoake White. Powder Coat.
<p>Ceiling Perforated Supply Secure diffusers shall be Holyoake Series CPSS and shall be constructed from heavy section aluminium surround to provide maximum security. 2 or 3 mm thick steel plate shall provide 30, or 40 % free area. Finished in a durable Powder Coat. All shall be as manufactured by Holyoake.</p>								

Note Seismic restraints are required, but not supplied.