



联明坪山冷氣制品廠有限公司

LUEN MING PENGSHAN AIR CONDITIONING FACTORY LIMITED



联明LM[®] FLANGE DUCTWORK JOINTING SYSTEM



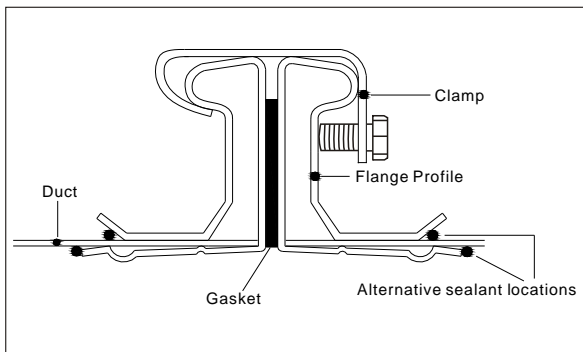


联明LM® FLANGE DUCTWORK JOINTING SYSTEM

CONSTRUCTION

FEATURE

1. Provide for rapid assembly of cross joints.
2. Available in standard metric sizes of 20mm, 30mm and 40mm.
3. Choice for material types and gauges to suit specifications and requirements.
4. Fully comply with DW/144:2016 - Specification for Sheet Metal Ductwork for low, medium and high pressure/velocity air systems.
5. Fully comply with BS EN 1507:2006 standards - Ventilation for buildings - Sheet metal air ducts with rectangular section - Requirements for strength and leakage.
6. Fully comply with the General Specification for Air-conditioning, Refrigeration, Ventilation and Central Monitoring & Control System Installation in Government Buildings of the Hong Kong Special Administrative Region.
7. Tested and certified by Professor Ir H.N.Lam of The University of Hong Kong.
8. Suitable for Joints & Stiffeners rating up to J6 and pressure Class A, B and C.
9. Full range of accessories to suit all sizes of flanges.



Typical Cross Section through the Profile

PART NUMBERS

- 20mm profile ref 联明LM®-120 + 联明LM®-20 corners
- 30mm profile ref 联明LM®-130 + 联明LM®-30 corners
- 40mm profile ref 联明LM®-140 + 联明LM®-40 corners

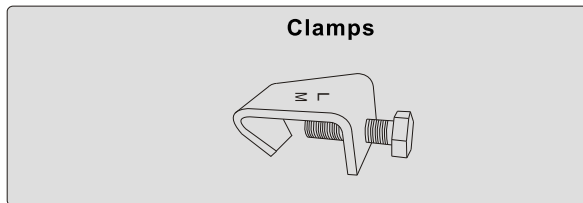
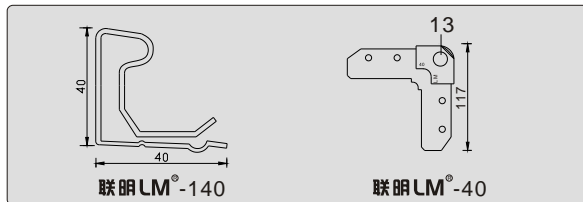
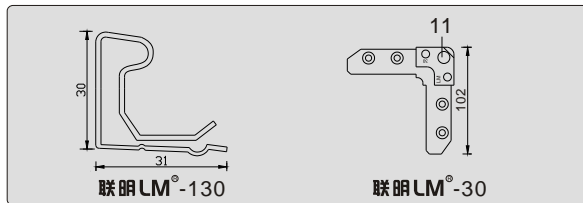
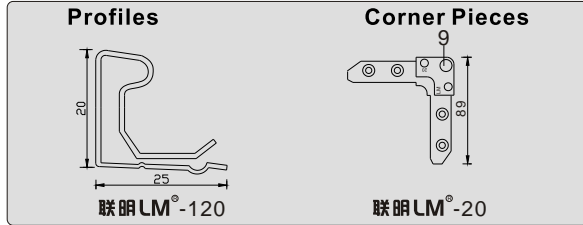
DW/144 BS EN 1507 TEST RESULTS

Flange	Rating					
	Corner	J2	J3	J4	J5	J6
联明LM®-120	联明LM®-20	✓				
联明LM®-130	联明LM®-30		✓	✓①②		
联明LM®-140	联明LM®-40				✓①	✓①

① Fitted with 10mm dia. tie rod at maximum interval of 1m.
② For low pressure class A and medium pressure class B, air duct with duct longest side ≥ 1600 mm shall be fitted with 10mm dia. tie rod; For high pressure class C, air duct with duct longest side ≥ 1250 mm shall be fitted with 10mm dia. tie rod.



PRODUCTS DETAILS



Material Specification

Ductwork Flange Profiles

	gauge(mm)	weight(kg)
聯明 LM [®] -120	0.7	0.475/m
聯明 LM [®] -130	0.8	0.73/m
聯明 LM [®] -140	1.0	1.12/m

Corner Pieces / Clamps

	gauge(mm)	weight(kg)
聯明 LM [®] -20	2.5	0.05
聯明 LM [®] -30	2.8	0.09
聯明 LM [®] -40	3.5	0.174

Packing Details

Ductwork Flange
 5000mm standard length

	bundles
聯明 LM [®] -120	100m
聯明 LM [®] -130	100m
聯明 LM [®] -140	50m

Corner Pieces

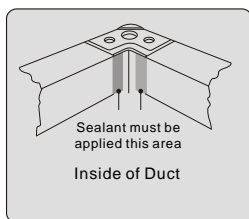
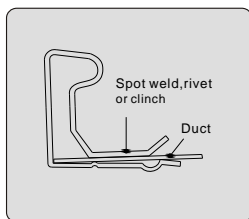
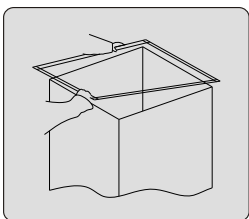
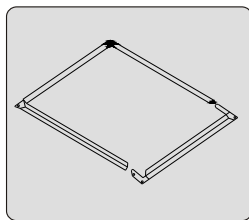
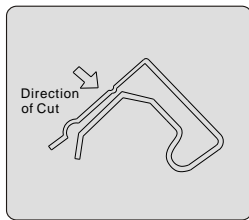
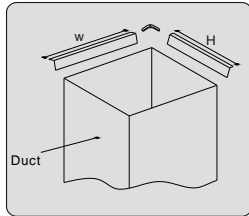
聯明 LM [®] -20 in boxes of 200
聯明 LM [®] -30 in boxes of 200
聯明 LM [®] -40 in boxes of 100

Clamps

in boxes of 200



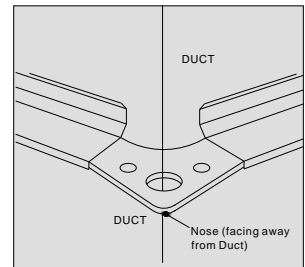
FABRICATION



Cut two lengths of profile to suit the duct width less 28 (W), and two lengths to suit the duct height less 28 (H). Note: outside dimensions of the duct are to be used, not internal.

For best results use a circular cut off saw with pneumatic vice. If any burring has occurred during the cutting of the flange, this must be removed before assembly.

Inserting four corners into the flange forms a rectangle frame as shown. Care must be taken to ensure the legs of the corners are fully inserted into the flange, the 'nose' on the corner faces away from the duct on which the frame is to be fitted. To comply with DW/144 corner pieces should be fixed into the flange. This can be done with a press tool. The cutting of the flange must be removed before assembly.



The frame is now ready to be fitted to the duct. Starting in one corner, the frame should be firmly tapped home by working away from this corner. On larger ducts a straight edge can be used to ensure the frame is on 'flat'.

The frame can be attached to the duct by various methods, spot welding or rivet. Spacing for fastenings to be as DW/144 table 2.3, 3.3 & 4.3. A fixing at a maximum of 100 mm from each corner is recommended, this will give additional strength during the installation.

Any burrs caused during the drilling for fixings should be removed from all surfaces before finally fixing the frame to the duct. Sealant should be applied if any method of fixing pierces the duct.

When the frame is securely fixed, a fillet of sealant needs to be run along the cut end of the flange on the inside of the duct.