



Change'Air™

PRODUCTS AND SERVICES LTD.

Engineered Excellence for Greener Classrooms

Face & Bypass Damper Design Classroom Unit

This Change'Air classroom unit uses face and bypass dampers to effectively control temperature and humidity. The design is popular for precise temperature control and freeze protection and in some applications can be controlled as a VAV air handler. This option in our standard chilled water/hot water design is available in two cabinet sizes and makes this classroom air handler one of the most popular optional designs we manufacture.

- ✓ Standard hot water/chilled water
- ✓ 2 pipe or 4 pipe configurations
- ✓ Standard Face & Bypass Dampers
- ✓ Optional internal power relief fan
- ✓ Full economizer capability
- ✓ Hot water in preheat or reheat position
- ✓ Various supply fan options
- ✓ Optional split system cooling coil
- ✓ LonMark or BACnet Controllers

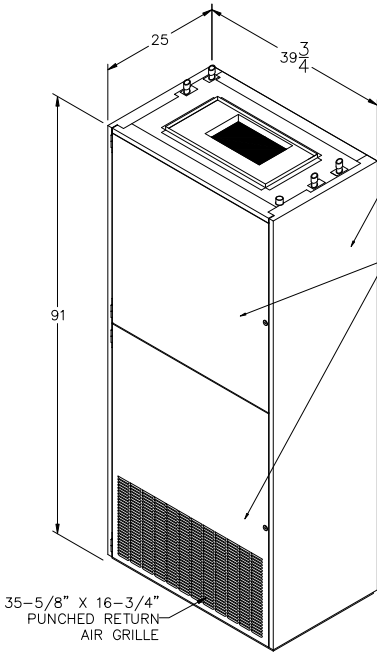
Freshman Series

Option	Details					
Cabinet Sizes	"B" (91"h x 39.75"w x 25"d)			"C" (91"h x 46.75"w x 25"d)		
Design Options	Standard Heating/Cooling Design			Face & Bypass Damper Design		
Heating	Hot water Coil 1 or 2 row up to 111 MBTU		Steam Coil 1 or 2 row up to 145 MBTU		Electric Resistance Up to 15 KW	
Cooling	Free Cooling Economizer Dampers	Chilled Water Coil 3, 4 or 5 row up to 72 MBTU		Split System Evaporator/Heat Pump Coil 3 or 4 row up to 84 MBTU		
Cooling Options	Stainless Steel Drain Pan	Insulated Drain Pan	Valve Packages for Chilled Water (Factory Installed)			
Ventilation	Standard Damper Assembly (Outside/Return Air Damper)					
Supply Fan Motor	½ hp LC-S ECM 1 fan body (1050 cfm max.)	½ hp LC-D ECM 2 fan bodies (1100 cfm max.)	½ hp SC-S ECM 1 fan body (1300 cfm max.)	½ hp SC-D ECM 2 fan bodies (1400 cfm max.)	¾ hp HC-S ECM 1 fan body (1600 cfm max.)	¾ hp HC-D ECM 2 fan bodies (1800 cfm max.)
Power Relief	½ hp XLC ERM (600 cfm max.)	½ hp LC ECM (1000 cfm max.)	½ hp SC ECM (1200 cfm max.)		½ hp HC ECM (1600 cfm max.)	
Fan Speed Control	ECM (3 speed 24 VAC or 0-10 VDC signal)			ERM (single or dual fully adjustable speed board)		
Electrical Supply	"A" 115/1/60	"B" 208/3/60	"C" 208-230-1/60	"D" 277/1/60	"E" 460/3/60	
Controls	CACS Stand Alone Programmable ES Stat	Factory Preprogrammed LonMark Compatible Controller		Factory Preprogrammed BACnet Compatible Controller	Supplied by Other Factory Installed	
Insulation	Standard Fibreglass Ductliner (airside coated)		Closed Cell		Perforated Steel Liner	
Filters	1" Pleated Disposable	2" Pleated Disposable	Permanent Washable Filter		Metal Filter Rack with Replaceable Media	
	MERV 8 (Standard)		MERV 11		MERV 13	

Important Note: This is not a compatibility table. Each option shows the available for the Series or model. For compatibilities on a specific design configuration please call your Change'Air sales representative.

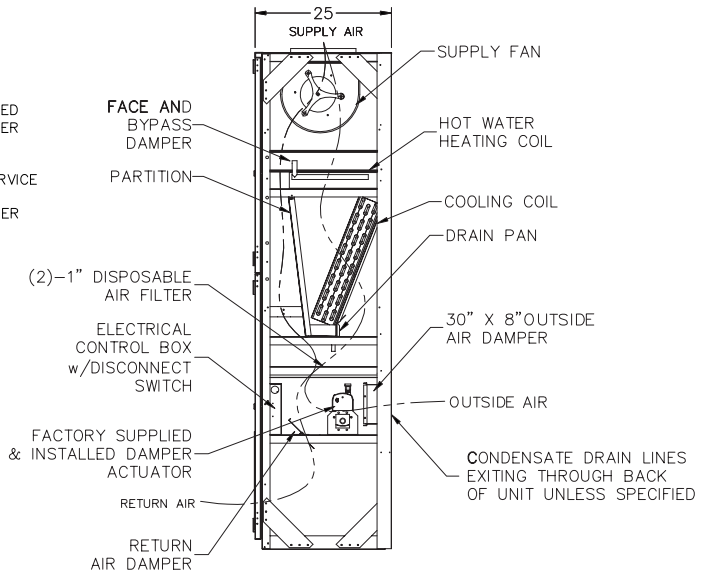
:Shaded areas show options available but not reflected in the drawings on reverse side.

FRESHMAN HCW 36 1000 B C

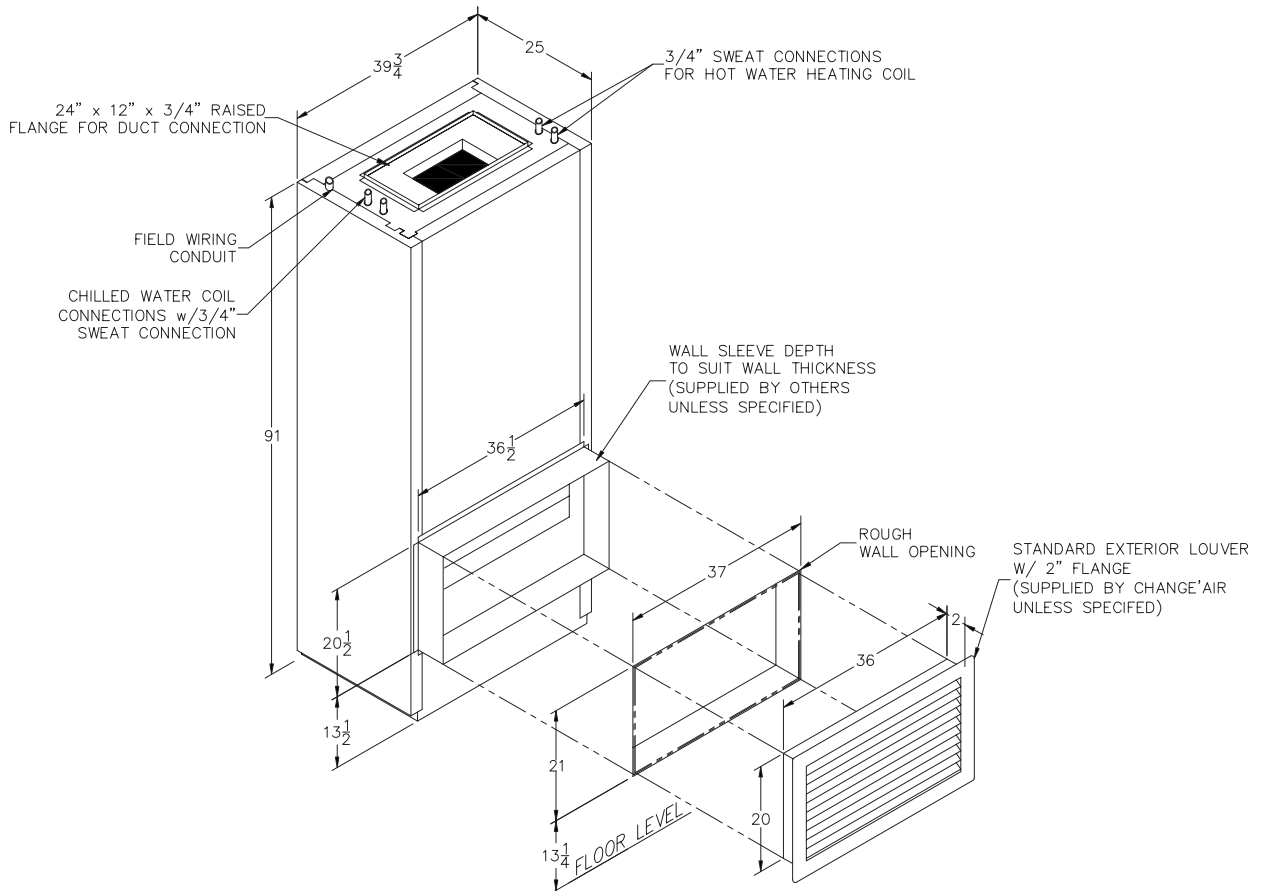


CABINET WALLS LINED WITH 1" ACOUSTILINER
DOUBLE HINGED SERVICE PANELS LINED WITH 1" ACOUSTILINER

ISOMETRIC VIEW



RIGHT SIDE VIEW



INSTALLATION VIEW