OHCL – Closable Horizontal Louvers

Both OHL-102 and 124 louvers are available as closable options. They offer performance and appearance similar to the basic model with the facility to close the complete louver by means of concealed damper blades, pivoted on the underside of each fixed blade, and gang operated by either manual or motorised means. They are ideally suited for use in high wind storm conditions. While open, they offer minimum air flow resistance with low droplet penetration for normal weather.

Typical uses are to provide controlled air movement in conjunction with powered and natural ventilation schemes in factories, plant rooms, power stations and similar projects.

Other suitable applications include controlable air inlets operating with smoke clearance systems, where louvers would normally remain closed, but would open in the event of an emergency.

Bird screen material slides horizontally into tracks between blades so that linkages are not obstructed.

Standard Construction

Frame:
6063 T5 extruded aluminium, mitred corners, mechanically locked with heavy aluminium gussets.

Blades (Fixed):
6063 T5 extruded aluminium with screw pipes for end fixing, clip lugs for snap on mullion supports and channels for bird screen and hinge.

Blades (Operating):
6063 T5 extruded aluminium (black anodised) with integral hinge and edge seal of extruded vinyl.

Bird Screen:
Expanded aluminium.

Finish:
Mill finish, natural or colour anodised, or powder coated. In all cases hinged control blade is black anodised.

MODELS:

OHCL-C-102 or 124	(Channel Frame)
OHCL-F-102 or 124	(Flanged Frame)

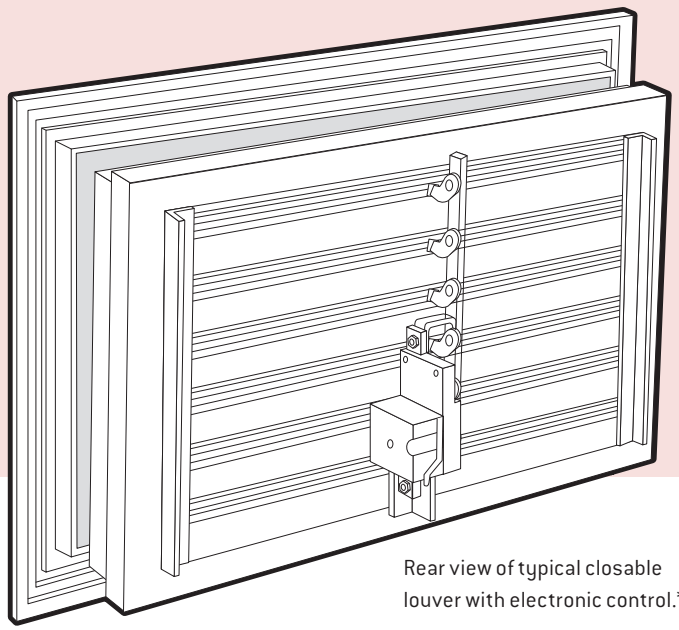
For continuous appearance with this model, contact your local Holyoake branch.

* Note: Motor can be mounted Top, or Bottom. Specify when ordering.

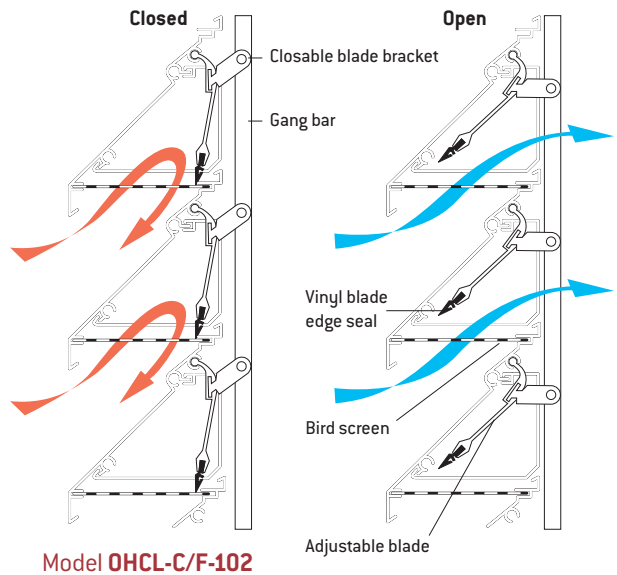
Performance Note

Models OHCL 102 and OHL 102 share the same effective pressure area chart.
Model OHCL 124 has slightly lower effective pressure area than OHL 124
Refer to chart pertaining to appropriate model.

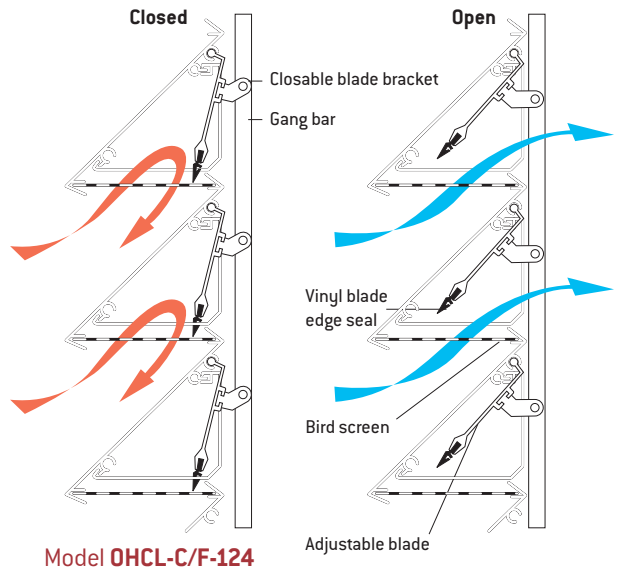
Closable Weather Louvers



Rear view of typical closable louver with electronic control.*



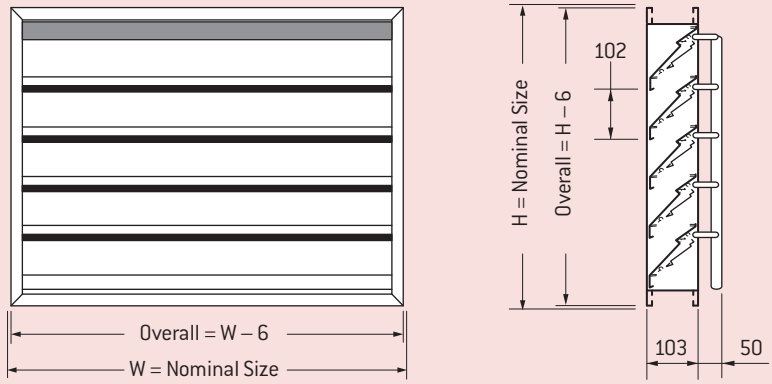
Model **OHCL-C/F-102**



Model **OHCL-C/F-124**

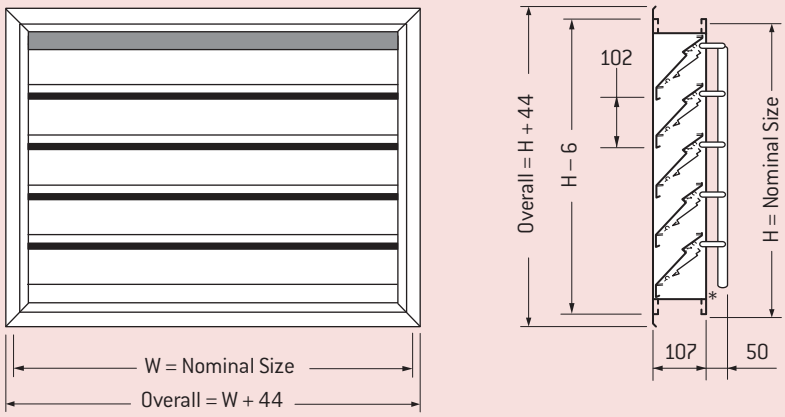
Model: **OHCL-C-102**

102mm Horizontal closable louver, curved blade profile, in a channel surround.



Model: **OHCL-F-102**

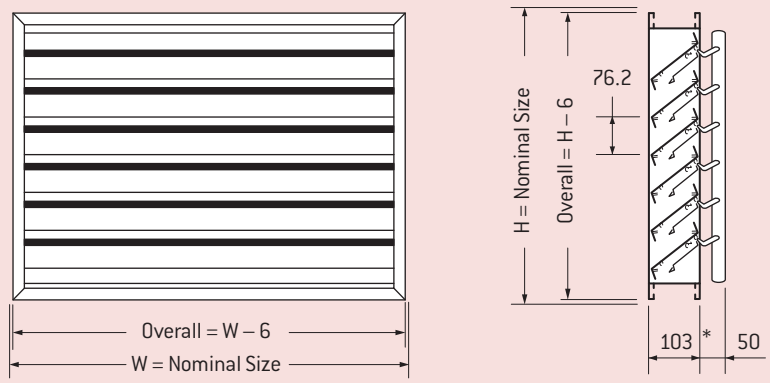
102mm Horizontal closable louver, curved blade profile in a flanged surround .



Guide Product Weights				
Approximate Weight in Kg.				
Size	OHCL-C-102	OHCL-F-102	OHCL-C-124	OHCL-F-124
300 x 300	2	2	2	2
700 x 700	11	12	11	12
1050 x 1000	22	23	22	23
1500 x 1500	46	48	46	48
2500 x 2000	102	107	102	107

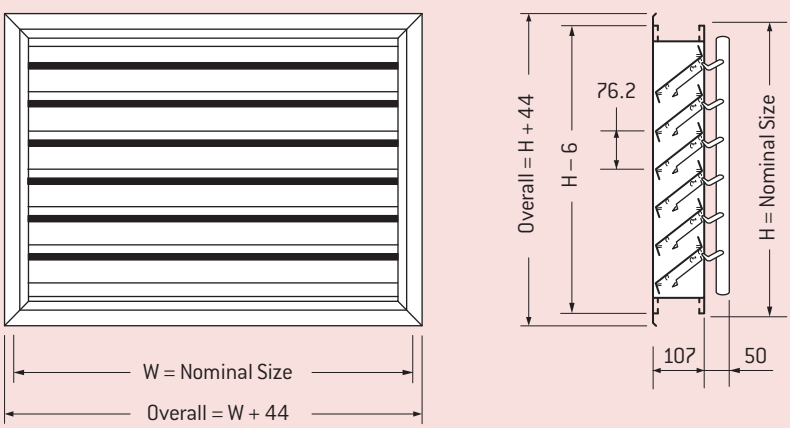
Model: **OHCL-C-124**

76mm Horizontal closable louver, straight blade profile in a channel surround.



Model: **OHCL-F-124**

76mm Horizontal closable louver, straight blade profile in a flanged surround.

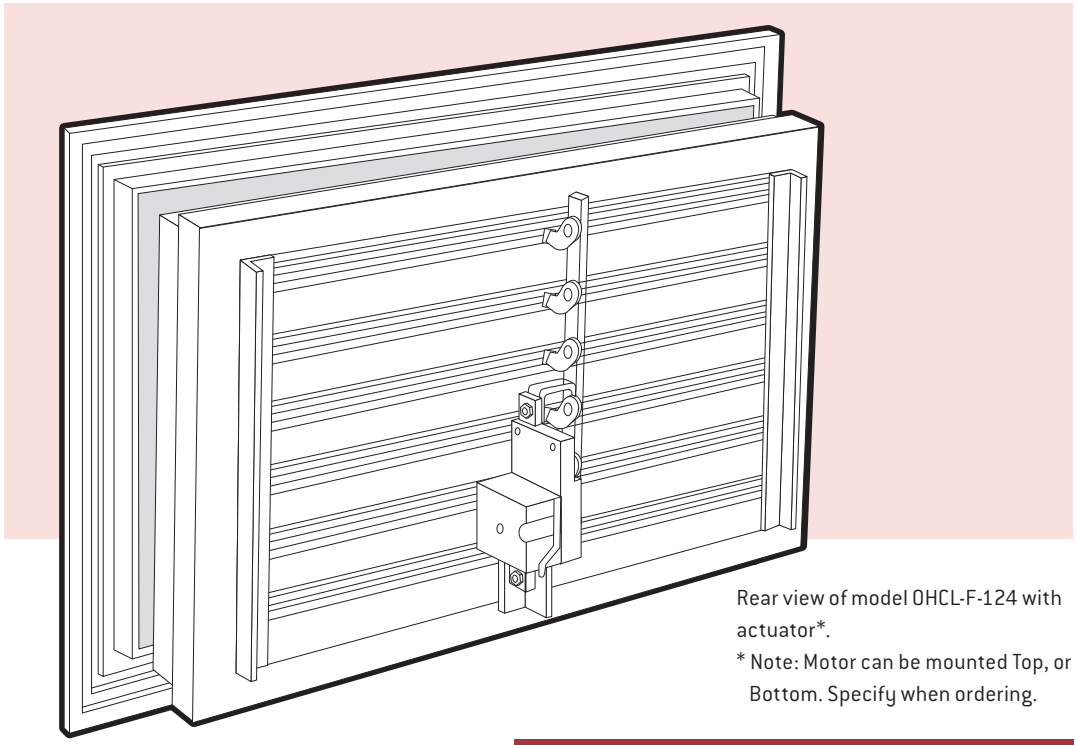


Notes

1. The number of Actuators or Manual Operators required is dependent on the overall size of the closable louver. Large applications will require several. Please refer to your local Holyoake branch for further details.
2. *110 mm minimum clearance should be allowed for motor fitment.

OHCL – Selection Data

Models: **OHCL-C-124**
and OHCL-F-124



Rear view of model OHCL-F-124 with actuator*.
* Note: Motor can be mounted Top, or Bottom. Specify when ordering.

Effective pressure area (sq. metres)

Blade Spaces	HEIGHT mm (NOMINAL)	WIDTH mm (NOMINAL) 300	450	600	750	900	1050	1250	1500	1750	2000	2250	2500
2	299	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.10	0.12	0.14	0.16	0.18
3	375	0.03	0.04	0.06	0.07	0.09	0.10	0.13	0.15	0.18	0.21	0.24	0.26
4	451	0.04	0.06	0.08	0.10	0.12	0.13	0.17	0.21	0.24	0.28	0.31	0.35
5	527	0.04	0.07	0.10	0.12	0.15	0.17	0.21	0.26	0.30	0.35	0.39	0.44
6	603	0.05	0.08	0.12	0.15	0.18	0.20	0.26	0.31	0.36	0.42	0.47	0.53
7	680	0.06	0.10	0.14	0.17	0.21	0.24	0.30	0.36	0.43	0.49	0.55	0.61
8	756 .05	0.07	0.11	0.16	0.20	0.24	0.27	0.34	0.41	0.49	0.56	0.63	0.70
9	832	0.08	0.13	0.18	0.22	0.27	0.30	0.39	0.47	0.55	0.63	0.71	0.79
10	908	0.09	0.14	0.20	0.25	0.30	0.34	0.43	0.52	0.61	0.70	0.79	0.88
11	984 .1	0.10	0.16	0.21	0.27	0.33	0.37	0.47	0.57	0.67	0.77	0.87	0.97
12	1061	0.10	0.17	0.23	0.30	0.36	0.41	0.51	0.62	0.73	0.84	0.95	1.06
13	1137	0.11	0.18	0.25	0.32	0.39	0.44	0.56	0.67	0.79	0.91	1.03	1.14
14	1213	0.12	0.20	0.27	0.35	0.42	0.47	0.60	0.73	0.85	0.98	1.10	1.23
15	1289	0.13	0.21	0.29	0.37	0.45	0.51	0.64	0.78	0.91	1.05	1.18	1.32
16	1365	0.14	0.23	0.31	0.40	0.49	0.54	0.69	0.83	0.97	1.12	1.26	1.41
17	1442	0.15	0.24	0.33	0.42	0.52	0.58	0.73	0.88	1.04	1.19	1.34	1.49
18	1518	0.16	0.25	0.35	0.45	0.55	0.61	0.77	0.93	1.10	1.26	1.42	1.58

0.2 0.5 1.0

Pressure requirement for outside louvers

Velocity, m/s **	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5
Intake*	2	4	7	11	16	22	29	37	45	55	65	77	89	102
Exhaust*	1	3	5	8	11	15	19	24	30	37	43	51	59	68

*Total Pressure Pa (N/m²) ** Velocity corresponding to Effective Pressure Area m³/s = Velocity Times Effective Pressure Area.

Example of selection for outside louvers

Select an outside louver for exhausting 0.581 m³/s with a pressure requirement of 11 Pa (N/m²).

1. From pressure requirement table a velocity of 3.0 m/s is indicated as acceptable for an exhaust pressure of 11 Pa (N/m²).
2. The effective pressure area corresponding to this velocity and air quantity is

$$\text{Area} = \frac{\text{m}^3/\text{s}}{\text{velocity}} = \frac{0.581}{3} = 0.19\text{m}^2$$

3. For a model OHCL-C-124 louver, an effective pressure area of 0.19 m² is satisfied by a 750 wide x 756 high louver at 0.2 m², etc.

OHCL, OHL, OHL-D, OHL-DRC, & OHL-LAOGS

Louver Description Code Examples and Suggested Specifications

OHCL – [F / C] – [102 / 124] – W x H – OPTIONS – FINISH

- OHCL: Model - Closable Outside Horizontal Louver
- F / C: Frame Style (F = Flange, C = Channel)
- 102 / 124: Blade size & configuration
- W x H: Opening
- OPTIONS: 24 V AC/DC Motor, 230 V AC Motor
- FINISH: Powder Coat, Anodised, Mill Aluminium

Closable Horizontal Outside Louvers shall be of extruded aluminium construction with black anodised blades with integral flange and extruded vinyl edge seal. Fixed blades incorporate expanded aluminium bird screen.
Blade closure is via Gang Linkage bars either manually, or by a factory fitted linear motor.
Closable Louvers shall be Series OHCL.
All shall be as manufactured by Holyoake.

OHL – [F / C] – [34 / 45 / 102 / 124] – W x H – [BM/IS] – FINISH

- OHL: Model - Outside Horizontal Louver
- F / C: Frame Style (F = Flange, C = Channel)
- 34 / 45 / 102 / 124: Blade size & configuration
- W x H: Opening
- BM/IS: Bird Mesh or Insect Screen
- FINISH: Powder Coat, Anodised, Mill Aluminium

Horizontal Outside Louvers shall be of extruded aluminium construction with 100 mm blades fixed at their ends with stainless steel screws into a welded aluminium frame. The bottom louver shall overlap the frame and the structure shall be designed to withstand a wind load of 95 Kg/m².
Louvers shall be type OHL - F - 102.
All shall be as manufactured by Holyoake. [Example specification shown is for a flanged OHL-F-102).

OHL – [F / C] – D – W x H – [BM/IS] – FINISH

- OHL: Model - Outside Horizontal Louver
- F / C: Frame Style (F = Flange, C = Channel)
- D: Drainable Blade
- W x H: Opening
- BM/IS: Bird Mesh or Insect Screen
- FINISH: Powder Coat, Anodised, Mill Aluminium

Drainable Horizontal Outside Louvers shall be of extruded aluminium construction with blades which drain through vertical down pipes to discharge water at the bottom of the louver.
Louvers shall be type OHL - D.
All shall be as manufactured by Holyoake.

OHL – [F / C] – DRC – W x H – SECURITY MESH – OPTIONS – FINISH

- OHL: Model - Outside Horizontal Louver
- F / C: Frame Style (F = Flange, C = Channel)
- DRC: Drainable Closable Blade
- W x H: Opening
- SECURITY MESH: Gym Mesh
- OPTIONS: 24 V AC/DC Motor, 230 V AC Motor
- FINISH: Powder Coat, Anodised

Drainable Closable Horizontal Outside Louvers, shall be of extruded aluminium construction, with special overlapping drainable closable blades and complete with extruded aluminium security mesh on the rear.
Blade closure is via Linkage bars in a concealed cavity, either manually, or by a suitable factory fitted motor.
Drainable Closable Louvers shall be Series OHL - DRC.
All shall be as manufactured by Holyoake.

OHL – LAOGS – W x H – [BM/IS] – FINISH

- OHL: Model - Outside Horizontal Louver
- LAOGS: Type
- W x H: Opening
- BM/IS: Bird Mesh or Insect Screen
- FINISH: Powder Coat, Anodised, Mill Aluminium

OHL - LAOGS Horizontal Outside Louvers shall be constructed from welded aluminium construction. Bird Mesh is fitted to the rear as standard.
Louvers shall be type OHL-LAOGS.
All shall be as manufactured by Holyoake.

OVL, OHL-KD, PHL, ST2/4 & LOUVER DOOR

Louver Description Code Examples and Suggested Specifications

OVL – [F / C] – [99 / 148] – W x H – [BM/IS] – FINISH

- OVL — Model - Outside Vertical Louver
- [F / C] — Frame Style (F = Flange, C = Channel)
- [99 / 148] — Blade Size and Configuration
- W x H — Opening
- [BM/IS] — Bird Mesh or Insect Screen
- FINISH — Powder Coat Anodised Mill Aluminium

Vertical Outside Louvers shall be of extruded aluminium construction with blades fixed at ends with stainless steel screws into a mitred and mechanically locked extruded aluminium frame. Intermediate blade stabilizing spacer clips shall be fitted where blade length exceeds 900mm and the structure shall be designed to withstand a wind load of 95kg/m^2.

Louvers shall be type OVL-C-99.

All shall be as manufactured by Holyoake.

(Example specification shown is for OVL-C-99).

OHL-KD – 100 – W x H – [BM/IS] – FINISH

- OHL-KD — Model - Outside Horizontal Louver - Knock Down
- 100 — Blade Style
- W x H — Opening
- [BM/IS] — Bird Mesh or Insect Screen
- FINISH — Powder Coat Anodised Mill Aluminium

OHL-KD (Knock Down) Outside Horizontal Louvers shall be manufactured from aluminium extrusion and are supplied in Kit Form for on site assembly, by others. The louver blades shall be sight proof, complete with two water stops and may be provided in a powder coat finish, with Bird Mesh, or Insect Screen.

Louvers shall be type OHL - KD - 100.

All shall be as manufactured by Holyoake.

PHL – [102 / 124] – W x L x H – [BM/IS] – FINISH

- PHL — Model - Penthouse Louver
- [102 / 124] — Blade Style
- W x L x H — Opening x Height
- [BM/IS] — Bird Mesh or Insect Screen
- FINISH — Powder Coat Mill Aluminium

PHL Penthouse Louvers shall be constructed from welded aluminium extrusion with mitred corners. Heavy, extruded aluminium blades and heavy gauge aluminium roof, with bird mesh, or insect screen.

Penthouse Louvers shall be Series PHL-102, or PHL-124.

All shall be as manufactured by Holyoake.

[OHL – ST2 / ST4] – W x H – FINISH

- OHL – ST2 / ST4 — Model - ST2 (2 Row) ST4 (4 Row) Sound Trap
- W x H — Opening
- FINISH — Mill Aluminium

OHL-ST Sound Trap attachments shall be constructed of a number of cylindrical sound absorbing elements, all housed in a sheet aluminium surround which matches the selected OHL louver.

Sound Traps shall be Series OHL - ST2, or OHL - ST4.

All shall be as manufactured by Holyoake.

OHL-LOUVER DOOR – [F / C] – [34 / 45 / 102 / 124 / D] – W x H – [BM/IS] – FINISH

- OHL-LOUVER DOOR — Model - Outside Horizontal Louver Door
- [F / C] — Frame Style (F = Flange, C = Channel)
- [34 / 45 / 102 / 124 / D] — Blade Size and Configuration
- W x H — Opening
- [BM/IS] — Bird Mesh or Insect Screen
- FINISH — Powder Coat Anodised Mill Aluminium

OHL-LOUVER DOORS are robustly constructed with Aluminium box section frames and extruded aluminium blades of the size and configuration required. High quality stainless steel hinges shall be used to support the relevant door loads. A 'High Quality' lock set and handle shall be provided as standard, as well as rubber seals to eliminate door rattle.

Louver Doors shall be Series OHL-Louver Doors.

All shall be as manufactured by Holyoake.

OHL – [F / C] – 100WT – W x H – [BM/IS] – FINISH

- OHL — Model - Two stage weather trap louver
- [F / C] — Frame Style (F = Flange, C = Channel)
- 100WT — Blade Size and Configuration
- W x H — Opening
- [BM/IS] — Bird Mesh or Insect Screen
- FINISH — Powder Coat Anodised Mill Aluminium

Horizontal Outside weather trap louvers shall be of extruded aluminium construction with 100mm front blades fixed at their ends and complete with second stage blades at the rear. The bottom louver shall overlap the frame and the structure shall be designed to withstand a wind load of 95 kg/m2.

Louvers shall be type OHL-F-100WT.

All shall be as manufactured by Holyoake.

Visit www.productspec.net/holyoake for product drawings in REVIT.