Technical Information

Ultimate Bath/Dryer Vent™

For Use With Meta Roof Coverings

Product Description

The Ultimate Bath/Dryer Vent[™] (BDV) for metal roof covering materials is a high-performance exhaust vent assembly designed and engineered to sustainably flash and seal the roof penetration to provide a long-term watertight installation.

Created as a durable assembly for steep slope roof use, the patented design incorporates industry leading penetration sealing methods and field adaptable connection means for either a bathroom vent exhaust duct or a clothes dryer exhaust duct.

With an aerodynamic exterior styling and featuring a lightweight coated aluminum damper, the assembly has been tested to withstand over 110 MPH wind driven rain without failure or leakage. The engineered assembly incorporates resilient features for noise suppression providing industry leading quiet damper operation.

The streamlined design for exhaust flow through the assembly ensures the lowest pressure drop found on any roof mounted exhaust vent assembly, and the lowest cracking pressure of any damper system on the market, resulting in the highest performance for a bathroom vent fan or clothes dryer exhaust. The assembly is constructed with a field removable cover for routine top-down cleaning and maintenance of the duct system.

The BDV can be used with any steep slope metal roof covering including metal shingles, double lock standing seam, snap-lock style metal panels, and more. The flashing plate and cover are constructed from Kynar[®] coated 24-gauge G-60 galvanized steel sheet which is exceptionally well suited for use in all but the most corrosive high chloride environments.

Instructions & Recommendations for Use

The Ultimate Bath/Dryer Vent[™] for metal roof covering materials is packaged in a protective carton which is imprinted with bilingual instructions illustrating proper installation on the roof. Included in the carton is a 4" galvanized duct drop connector, a polypropylene 3" to 4" duct adapter, and a snap-in bird and vermin screen (for non-clothes dryer exhaust applications only).

It is recommended that the BDV exhaust vent be delivered to the vent penetration on the roof in the original protective carton. In this manner the installer will have everything required on the roof and will have the carton with bilingual instructions at the installation site for reference.





Prior to installation, the 4" duct drop connector must be field assembled to the main vent assembly as shown on the carton instructions and illustrations. This is a simple operation, just align and press to snap into place, then check to ensure a proper connection is achieved. Duct connections can be made from the roof if the duct can be accessed through the roof during installation, if not then attic space access by the installer will be required.

Care must be exercised when preparing the substrate at the penetration location. Clearance is required in the substrate to ensure that fasteners at the perimeter of the flashing plate cannot engage the substrate. The vent flashing plate and fasteners must be free to move with the roof metal covering during thermal excursions.

The installer must prepare the substrate prior to affixing the roof metal covering at the penetration location. Once the penetration location is prepared and the duct connections are either completed or are considered for later connection within the attic space, install the BDV exhaust vent on the metal roof covering surface using sealant between the roof covering metal and the underside of the vent flashing plate.

Apply metal screws around the flashing plate perimeter as required using caution not to engage the substrate. Finish by applying a bead of sealant around the entire flashing plate perimeter.

Additional information, including instructional videos of installation techniques can be found on the Lifetime Tool® website at **www.lifetimetool.com**

Benefits of using the Ultimate Bath/Dryer Vent™

The engineered Ultimate Bath/Dryer Vent™ assembly utilizes materials known for long-term outdoor exposure, including:t



- Kynar[®] coated 24-gauge G-60 galvanized steel sheet for the flashing plate and for the cladding on the removable cover sub-assembly
- Exterior grade heavy wall injection molded ASA is utilized for the structure of the vent housing and removable cover
 - Compression molded high consistency EPDM elastomer used to provide a watertight seal assembled and sealed using a proprietary inseparable crimp method over a high consistency compression molded elastomer for long-term performance
 - Extreme weatherable polymer coated aluminum is utilized for the thin wall deep formed damper which is inseparably affixed to a 303 stainless steel axle to provide years of non-corrosive service

The patented BDV features a lightweight damper system, including noise suppression components for long-term quiet operation. The deep formed design of the damper component assists in shaping the exhaust flow stream and allows the use of thinner and lighter materials enabling the lowest opening pressure differentials in the industry and providing one of the lowest pressure drops through the device for any roof mounted exhaust vent. All resulting in improved long-term performance for a bathroom vent fan or clothes dryer exhaust.

Created with an aerodynamic shape to resist wind uplift during high wind events, the BDV is an aesthetically pleasing part of the roofing system, not a box on the roof. The field removable/replaceable cover assembly provides the ability for routine periodic top-down maintenance and clean out of the connected exhaust duct system. This feature is found on no other commercially available exhaust vent assembly and is especially important for dryer exhaust duct connections. A high-performance stainless-steel bird and vermin screen is included for use in **NON-CLOTHES DRYER** exhaust duct connections **ONLY**.

All components are made, assembled, and packaged in the U.S.A. Warrantied for the life of the roof covering materials that it is installed with. A truly sustainable roof component built to last and perform on the roof.

Specific Data - Materials of Construction:

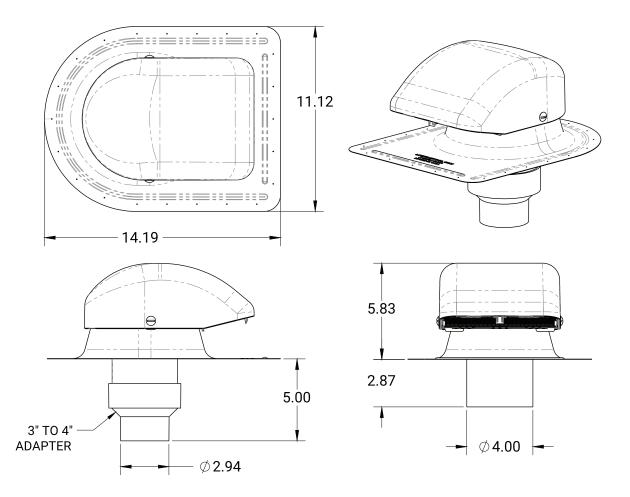
- Flashing Plate Deep drawn and stamped Kynar[®] coated 24-guage G-60 galvanized steel sheet and is available is several standard roof metal colors. Meets or exceeds ASTM A635-09 standards, providing superior corrosion resistance in all outdoor environments except coastal and beach front homes and buildings.
- Internal Structure & Cover Body Injection molded heavy wall ASA polymeric compound known for excellent weatherability and dimensional stability.
- **Damper** Deep formed from a precoated aircraft grade aluminum alloy and is inseparably affixed to a 303 stainless steel axle.
- **Crimped Watertight Seal Component** Compression molded from a proprietary grade EPDM thermosetting elastomer, as are the noise suppression components utilized to prevent damper noise during operation and high wind events.
- **Cover** Aerodynamic cover is deep drawn from a Kynar[®] coated 24-gauge G-60 galvanized steel sheet with a classic dark bronze finish. This drawn cover element is inseparably affixed to the injection molded ASA cover body.
- Cover Screw Fasteners & Threaded Nuts Allows removal of the cover for cleaning and maintenance, are manufactured from marine grade 316L stainless steel and are finished with a black oxide coating for a lifetime of use on the roof.

Availability:

The Kynar[®] coated 24-gauge G-60 galvanized steel Ultimate Bath/Dryer Vent[™] is available for use with metal roof covering materials, as shown in the dimension and sizing drawing below.

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The Ultimate Bath/Dryer Vent[™] for metal roofs meets or exceeds each of the testing criteria listed below:

Applicable Testing:

ASTM E 166-18Wind and Wind Driven Rain Performance Test (exceeded 110 MPH)T151-18Air Flow Test (Pressure drop through various vents)T133-19Air Flow Performance TestFlorida TAS 100-95Test procedure for wind and wind driven rain resistance (110+ MPH)

Notice:

All parts are manufactured and assembled in the U.S.A. Protected by U.S. Patents 10,927,550 and D934,409 Florida Product Approval No. FL 31164 Lifetime Tool® is registered by and the property of Lifetime Tool and Building Products, LLC no unauthorized use is permitted. CAGE Code No. 94YWS

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