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iso**REDMAX**[®]

iso**REDci**[®]

Installation Guide

ISO RED MAX and ISO RED CI are our line of rigid polyiso insulation with multiple facer options that add thermal insulation for uses in Class B applications including residential and light commercial to commercial curtain walls on other E84 Class A polyiso applications.

Made in USA 

iso**REDMAX**
HD
polyiso sheathing by **OX**

iso**REDMAX**
LD
polyiso sheathing by **OX**

iso**REDMAX**
WF
polyiso sheathing by **OX**

iso**REDMAX**
GF
polyiso sheathing by **OX**

iso**REDci**
polyiso sheathing by **OX**

iso**REDci**
FF
polyiso sheathing by **OX**

Energy Efficiency

Easily add R-value and eliminate insulation gaps.

Multiple Applications

Use it on interior walls, exterior walls, ceilings and sub-terrain applications.

Easy to Install

Light panels go up fast, saving time and money.

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Attention:

This installation guide is intended to provide general information for the end user. The following guidelines will help you properly install ISO RED MAX and ISO RED CI. We encourage you to read these guidelines in order to minimize any risk of safety hazards and to prevent voiding any applicable warranties. This manual is a general installation guide and does not cover every installation situation. Customer is responsible for complying with all applicable laws, regulations, and building codes (collectively, "Laws") of the location where any products (individually, "Product" and collectively, "Products") manufactured by Ox Engineered Products, LLC ("Ox") are actually used, specially including, but not limited to, Laws regarding use and disposal of the Products by Customer. Ox expressly disclaims all liability for the Products other than as expressly provided in the applicable warranty for the Product (the "Product Warranty") which is available from Ox at the address below. OX EXPRESSLY DISCLAIMS ANY OTHER WARRANTY EXPRESSED OR IMPLIED INCLUDING SPECIFICALLY, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. None of the information contained in this brochure shall act as a waiver of any patent, trademark, copyright or other intellectual property right of Ox, nor shall any such information expand any rights or remedies set forth in the applicable Product Warranty. Ox shall not be liable for compliance of the Products with any test results obtained by third parties that may be included in this brochure. Actual results may vary. Not all Products are approved for use in all jurisdictions. The Products are not load bearing. Do not attempt to walk on them. Some Ox Products are amiable. Ox disclaims liability for damages caused by incineration of the Products. By purchasing the Products, Customer irrevocably consents that any dispute arising

between Ox and Customer will be determined under Michigan law without consideration of any of law analysis and that any such dispute shall be brought only in the state or federal courts serving the locality in which Ox's headquarters are then located. By purchasing the Products, Customer expressly consents to the exercise by such courts of personal and subject matter jurisdiction and venue for such purposes.

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Storage:

Maintain packaging protection until using the product. If stored exposed without protective packaging, cover with a waterproof tarpaulin. Do not store directly on the ground unprotected or in standing water. Normal care should be taken to avoid excessive moisture exposure (soaking) to unpackaged product.

Safety Guidelines:

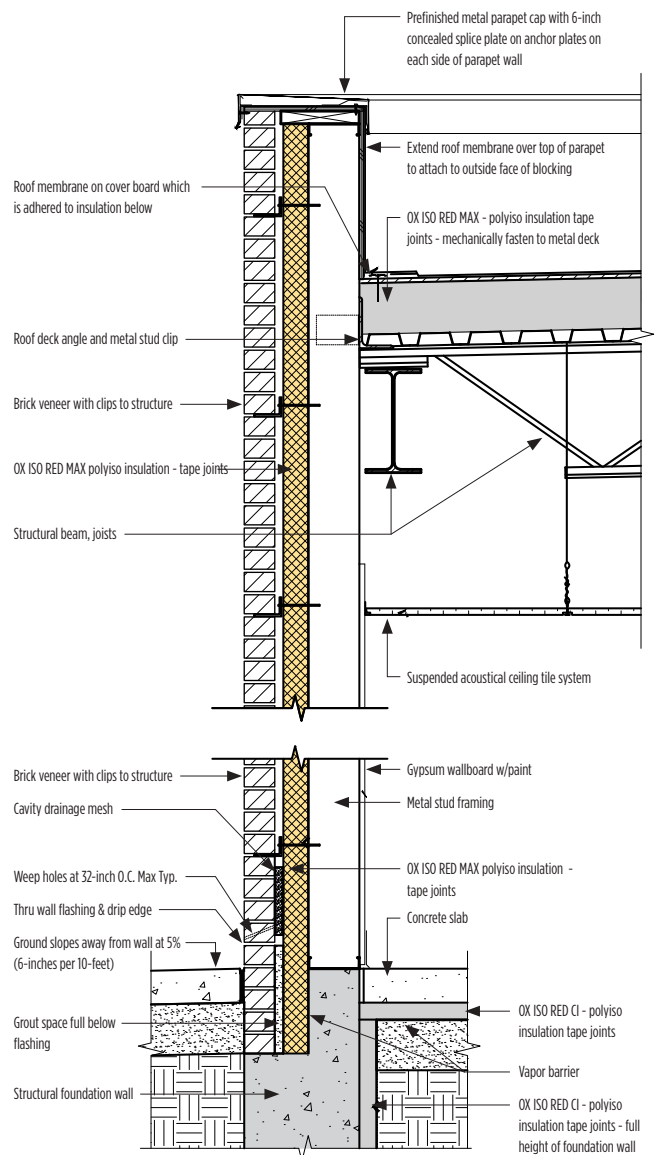
- Follow all OSHA regulations and any other safety guidelines and safety practices.
- Use approved safety belts and/or harnesses or other fall protection equipment

03 | Installation Overview

Overview

The ISO RED System shall be defined to be ISO RED MAX® (ASTM E84 Class A)/ISO RED CI® (ASTM E84 Class B), Ox 2 7/8-inch Seam, Ox Commercial Seam Tape and Ox Arctic Flashing Tapes. In addition to being subject to the other limitations contained in this warranty, the water and air barrier warranties are expressly contingent upon the use of only System component products. The use of any rigid insulation other than ISO RED MAX/ISO RED CI, or any seam and flashing tapes other than Ox Seam and Ox Arctic Flash Synthetic Flashing Tapes shall render the air and water barrier warranties entirely inapplicable and/or null and void.

Detail A

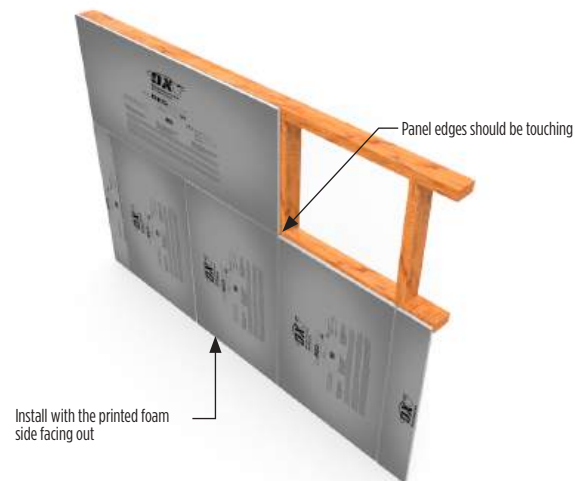


04 | Panel Orientation/Fastening

Orient Panels

- Install ISO RED MAX/ISO RED CI panels with the printed foam side facing out
- The panels may be installed with the long side of the panels oriented either horizontally or vertically to the framing members
- Panels should be installed with foam edges touching
- Cut panels with standard circular saw

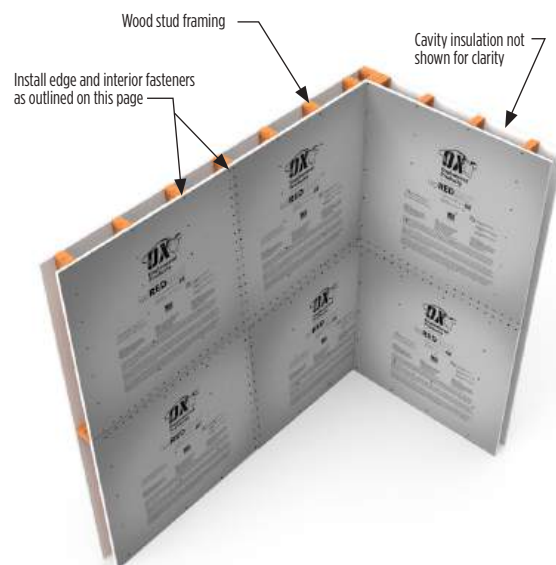
Detail B



Fasten Panels

- **Wood framing** (16 or 24-inch stud spacing): Around perimeter and in the field of the board, fasten panels every 12-inches using capped nails, staples or roofing nails. Minimum embedment of 1-inch into framing. Fastener head should be flush with surface.
- **Metal framing** (16 or 24-inch stud spacing): Around perimeter and in the field of the board, fasten panels every 12-inches using corrosion resistant self-tapping screws with 1-inch diameter cap or washer. Minimum embedment of 1/4-inch into framing. Fastener head should be flush with surface.
- **Interior masonry or concrete:** Apply adhesive beads spaced every 16-inches horizontally or around the full perimeter. Fasten panels every 12-inches around the perimeter and in the field using mechanical fasteners. A combination of minimum fasteners to hold until adhesive sets is also acceptable.
- **Exterior masonry or concrete below grade:** Use granular water-draining fill method only as required to ensure intimate contact to masonry surface or water proofed surface

Detail C



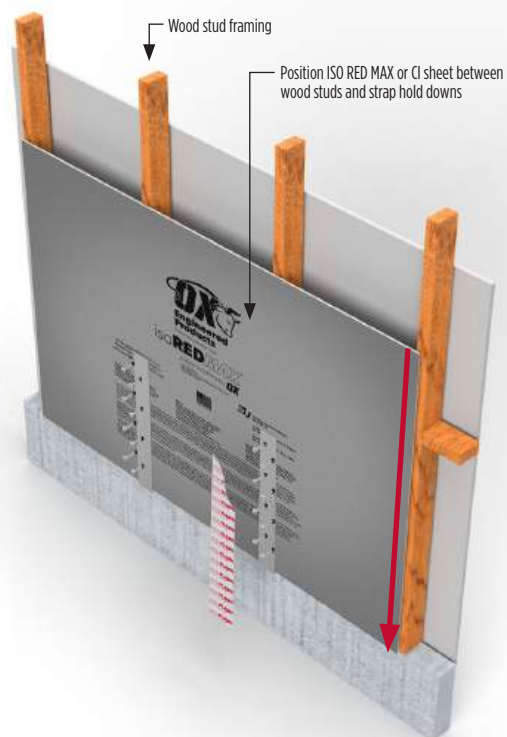
05 | Panel Orientation/Fastening

Strap Hold Downs

- Slide the ISO RED MAX/ISO RED CI sheet between the studs and strap hold downs
- Screw straps through the ISO RED MAX/ISO RED CI to the stud behind
- Apply Arctic Flash flashing tape to fully cover the strap hold downs and screws
- Install edge and interior fasteners as described above

NOTE: The red arrow indicates where the sheet should be positioned before being screwed into place

Detail D

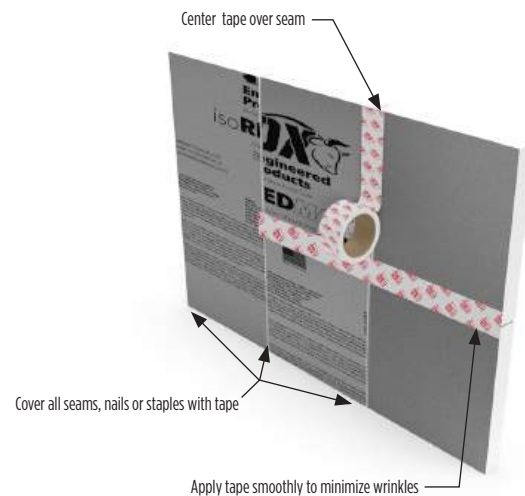


06 | Panel Taping

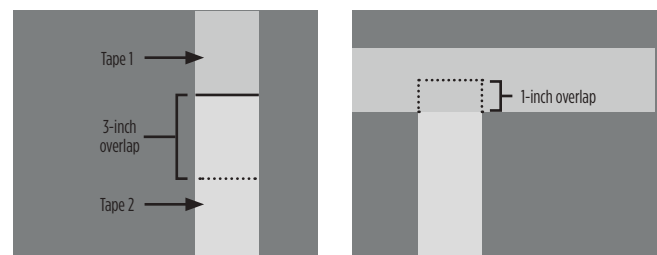
Taping

- Install tape per manufacturer's instructions on a clean/dry surface
- Center the tape over the joints/seams
- Apply pressure to the tape to ensure a secure bond. Smooth out any wrinkles to insure proper adhesion.
- When taping joints, use shingle fashion technique as shown in Detail F
- At T-joints, the tape pieces should overlap by at least 1-inch as shown in Detail F
- The warranty requires that all interior and exterior corners be taped using Arctic Flash flashing tape to fully cover the joints/seams as shown in Detail G and Detail H
- Building wrap is not required to meet WRB requirements if all joints are taped
- **Use only OX approved (or equivalents) tapes:**
 - **Seam tape:** OX Seam Tape or Commercial Seam Tape 2 7/8-inch nominal width
 - **Flashing tape:** OX Arctic Flash Synthetic Flashing
 - 6-inches at all penetrations
 - 4-inches at interior and exterior corners

Detail E



Detail F - Shingle fashion technique



Detail G - Interior corner flashing tape



Detail H - Exterior corner flashing tape

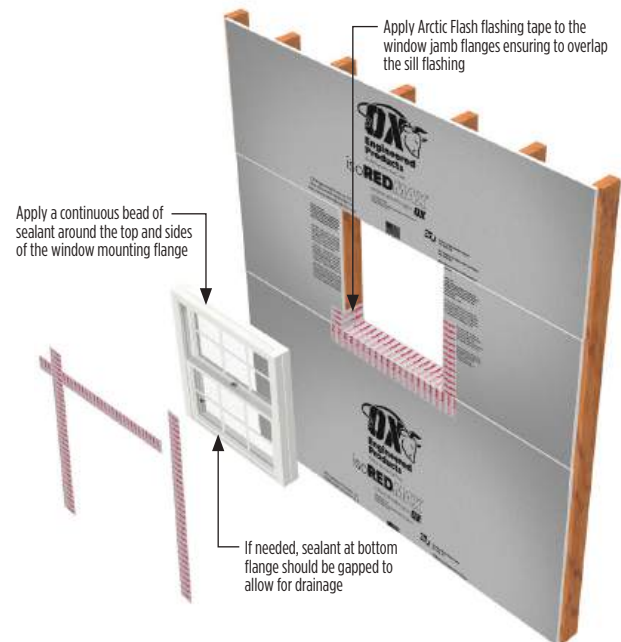


07 | Window Installation

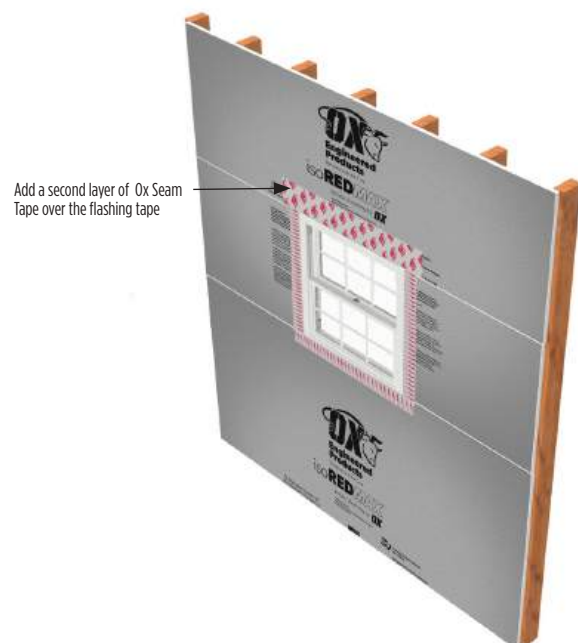
Window Installation

- Install approved OX sill/pan flashing as shown in Detail I on a clean/dry surface
- Apply sealant around inside face of window mounting flange. If needed, gap sealant at the bottom flange to permit drainage. Install and level window per manufacturer's instructions.
- Cut two pieces of approved OX Arctic Flash flashing tape and apply each to the window jamb flanges. Be sure the jamb flashings overlap the sill flashing.
- Cut a length of approved OX Arctic Flash flashing tape and apply to the head flange on the window. Be sure the head flashing overlaps the jamb flashing.
- Apply pressure to the tape to ensure a secure bond and smooth out any wrinkles to insure proper adhesion
- From the interior of the rough opening, apply low-pressure polyurethane foam for windows between the rough opening and the window frame
- **DO NOT TAPE BOTTOM WINDOW FLANGE**

Detail I



Detail J - Completed installation

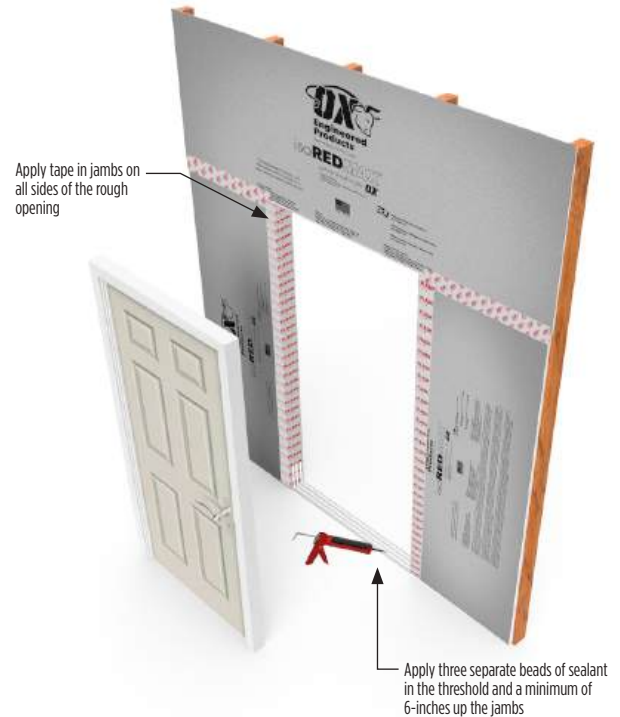


08 | Door Installation

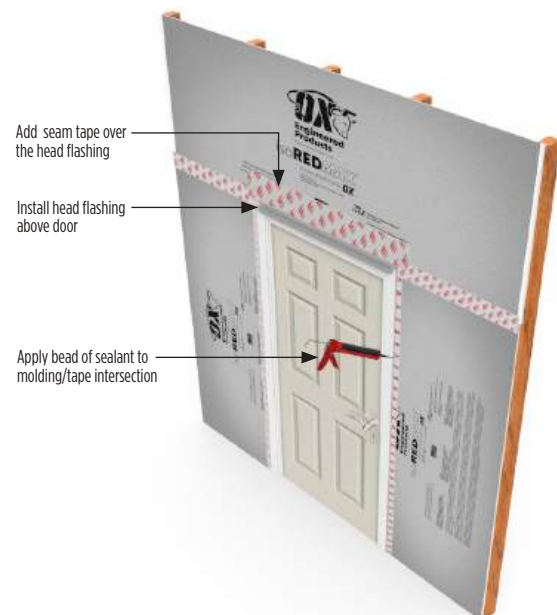
Brick Mould Door Installation

- Install approved OX Arctic Flash Flashing tape in jambs of the rough opening as shown in Detail K on a clean/dry surface
- Apply three separate beads of sealant in the threshold and a minimum of 6-inches up the jambs
- Once the door has been installed into the rough opening in accordance with the manufacturer's installation instructions, apply a bead of sealant at the molding/tape intersection
- Install head flashing above door and then tape top of head flashing with OX Seam Tape

Detail K

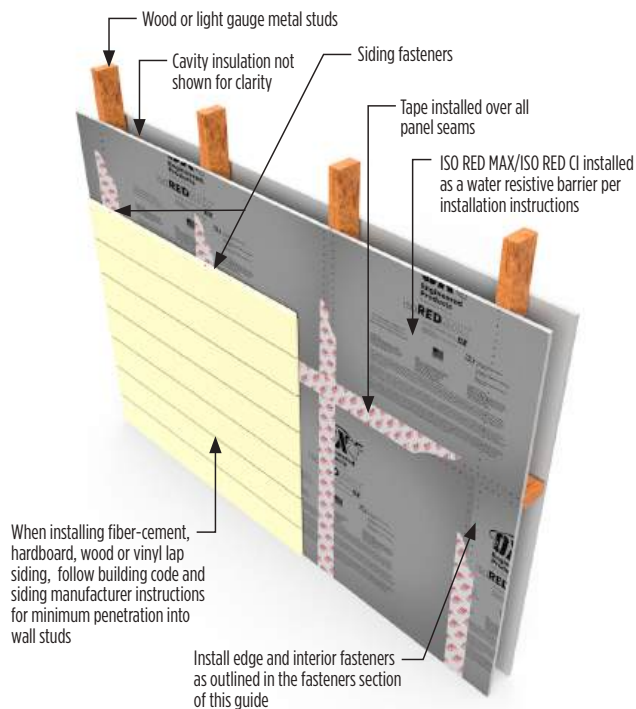


Detail L

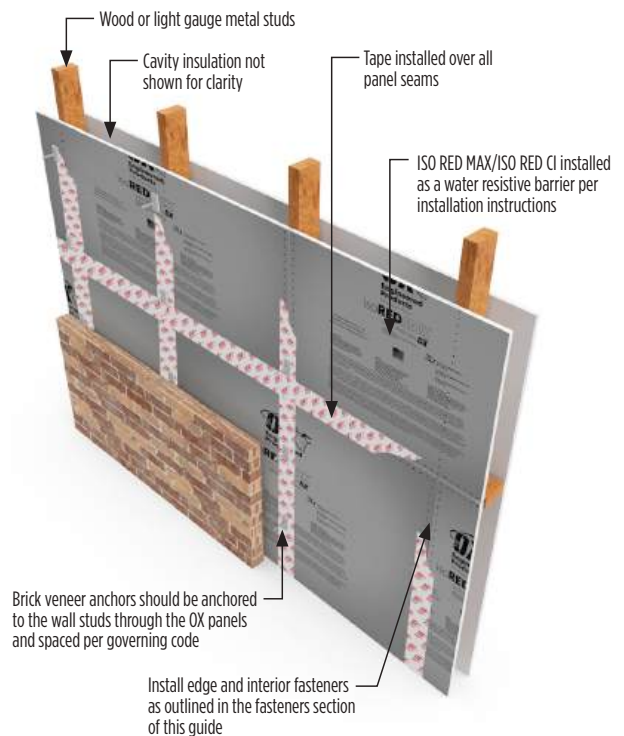


09 | Exterior Cladding Installation

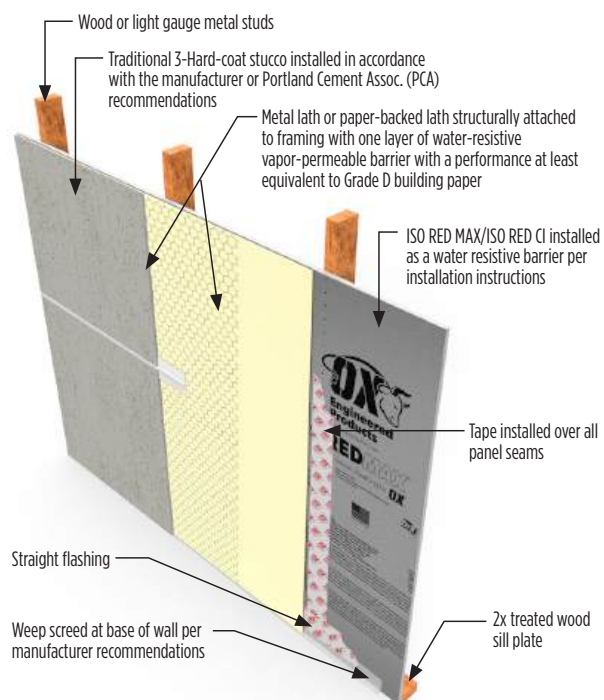
Lap Siding



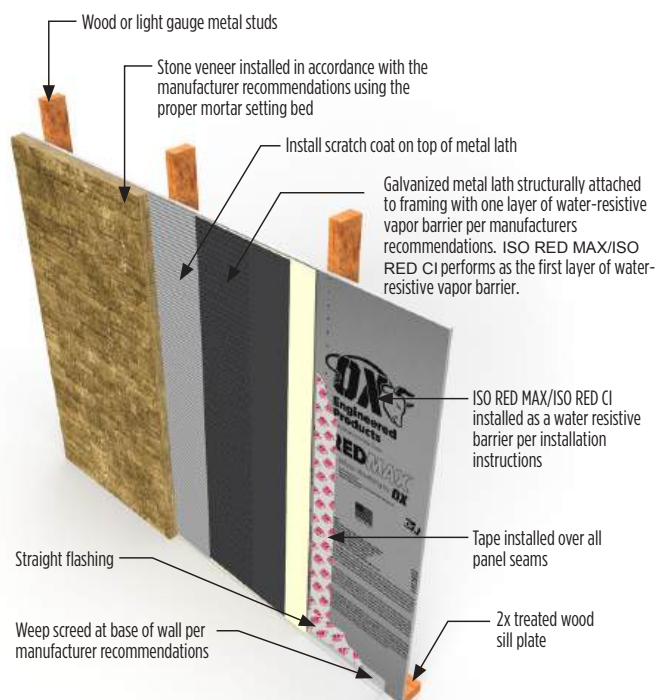
Anchored Masonry Brick Veneer



Stucco



Stone Veneer



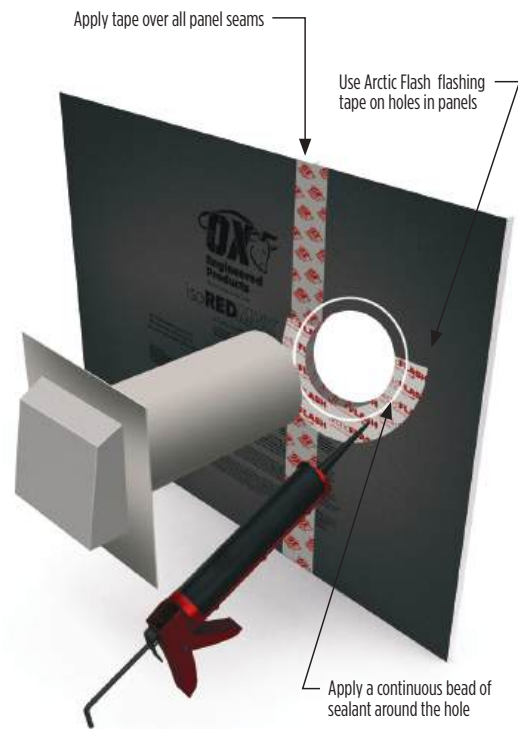
DISCLAIMER: The diagrams in this guide represent a general overview for the proper exterior cladding installation. Defer to the installation instructions of your cladding manufacturer and local code requirements to ensure best results.

10 | Vents and Openings Installation

Typical Vent Installation

- Install approved OX tape in holes in ISO RED MAX/ ISO RED CI panels as shown in Detail M on a clean/dry surface
- Use flexible flashing tape on lower side of holes covering the foam panel interior
- Apply a continuous bead of sealant on top of flexible flashing tape
- Install heavy flashing on top and sides of vent and then tape top of heavy flashing with OX approved tape
- All vents and penetrations should be properly blocked per manufacturer recommendations

Detail M



Detail N - Completed installation

