Table of Contents

Cool Wall Vent Kit Contents ......................................................3
TC42 Steel Stud Framing Kit ......................................................4
Steel Frame assembly instructions ..........................................5
Mounting the Lower Venting Box to Steel Frame .......................6
TC42 Lintel Knock-outs ...........................................................7
Steel Frame & Lower Venting Box Affixed to TC42 .....................8
Building the Lumber Frame ......................................................9
Mounting the Upper Grill ..........................................................10
Installing the Flexible Ducting ..................................................12
Installation of Fireplace Venting ..............................................13
Distribution of Facing Material .................................................14
Venting Near the Ceiling ..........................................................15
The Cool Wall Vent Kit includes:

- The Upper Grill
- The Lower venting box.
- Five Flexible ducts.
- Hardware for installation
When assembling the steel frame for use with the Cool Wall Vent kit, exclude pieces #4 & 6.

Figure 1: TC42D2 Steel frame parts.

Each Kit Contains:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SCREW, TEKS #8 X 1/2 (NOT SHOWN)</td>
<td>PKG 40</td>
<td>5</td>
<td>STUD, HEADER HORIZONTAL 58 1/4” L</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>SIDE STUD, VERTICAL INNER 53 3/4” L</td>
<td>2</td>
<td>6</td>
<td>STUD PLATE, HORIZONTAL</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>SIDE STUD, VERTICAL OUTER 53 3/4” L</td>
<td>2</td>
<td>7</td>
<td>BASE PLATE</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>CENTER STUD, VERTICAL SHORT</td>
<td>2</td>
<td>8</td>
<td>FRAMING PLATE</td>
<td>4</td>
</tr>
</tbody>
</table>
1. Top Frame Assembly

Lay out the horizontal header stud (Item #5 in Figure 1) on a large flat surface. (Position all pieces on their narrow edges as shown in Figure 1.

2. Attach Side Studs (Legs)

Lay the inner vertical side studs (Item #2 in Figure 1) so that it’s top end aligns with the 2nd set of screw holes of the header stud (Item #5 in Figure 1). Fasten with screws provided.

Fasten the vertical outer side studs (Item # 3 in Figure 1) to the ends of the horizontal header stud (Item #5 in Figure 1).

Position the base plates (Item #7 in Figure 1) at the bottom of the inner and outer side stud legs and fasten with the screws provided.

Turn the assembled frame over and install screws to the remaining fastening points.

3. Attach Lower Venting Box to steel frame

Align and secure the Lower Venting Box to the steel frame with provided hardware prior to mounting the steel frame and Lower Venting Box onto the TC42. See “Mounting the Lower Venting Box to Steel Frame” on page 6.

4. Attach the Assembled Frame with the Lower Venting Box to the Unit

Align the assembled frame and Lower Venting Box to the TC42 and attach to the framing brackets (Items #8 in Figure 1). Align the framing brackets to the fastening points through the access holes in the outer side studs (Item # 3 in Figure 1).

5. Secure to Lumber Framing using four framing tabs

Bend the (four) framing tabs out and use to secure the steel frame assembly and the TC42 to the lumber framing through the horizontal top header and the base plates (Items #5 & 7 in Figure 1).

6. Install Facing Material.

Install Facing Material according to the requirements described in “Distribution of Facing Material” on page 14.
Mounting the Lower Venting Box to Steel Frame

With the steel frame completed (Figure 2), mount and secure the Lower Venting Box to the frame (Figure 3) using supplied hardware.

When the Lower Venting Box is secured to the steel frame, the front of the Lower Venting Box will have an open cavity exposed. This cavity will be enclosed once the Non-combustible facing material is installed (Figure 4).
There are 2 rows of knock-outs (Figure 6) on the TC42 fixed Lintel. Only one of these rows will have their knock-outs removed to accommodate the Lower Venting Box (Figure 5). Which row is removed depends on where the steel frame is positioned over the TC42 Lintel and the 1/2 inch (minimum) thickness requirement of the facing material.

If the steel frame is positioned so that the Lintel protrudes from the steel frame to its maximum, then the rear set of knock-outs will be removed. If the steel frame is positioned so that the Lintel protrudes minimally from the steel frame, then the front row of knock-outs will be removed.

Note: Be sure of the final placement of the TC42 and its steel frame before deciding on which row of knock-outs are to be removed.
Affix the Steel Frame (with the attached Lower Venting Box) to the TC42 using supplied hardware. Once the steel frame is affixed to the TC42, the entire unit may then be adjusted into its final position. The installer must keep in mind that the lumber framing will be built around the steel frame and the TC42 and so accurate positioning of the unit before construction of the lumber frame is critical.
Once the TC42 and its attached steel frame is in its final location, the lumber framing can be built. A smaller frame must be built into the lumber frame to accommodate the Upper Grill (Figure 8) but only the bottom horizontal header should be installed at this time.

The Flexible Ducting supplied comes in 3 foot lengths which can be stretched to approximately 5 1/2 feet to allow more distance between the Upper Grill and Lower Venting Box. This allows for the installation of various sized television sets or other forms of wall hanging. It is necessary when calculating the final position of the Upper Grill, to consider where both ends of the Flexible Ducting will attach to the Upper Grill and Lower Venting Box.
Mounting the Upper Grill

When constructing the lumber frame around the steel frame, secure the bottom header for the Upper Grill to the lumber frame but do not install the upper header (Figure 9). The Upper Grill will fit over the bottom header and can be secured at this time using the supplied hardware.

Once the Upper Grill is secured to the bottom header, the upper header can then be fitted over top of the Upper Grill and secured to the lumber frame (Figure 10).

After the Upper Grill has been installed, the lumber frame can be completed (Figure 11).
Figure 11: Upper grill secured to lumber framing
Installing the Flexible Ducting

Once the Upper Grill is installed, the Flexible Ducting can be installed using supplied hardware.

Figure 12: Flex ducting installed.
The Fireplace Vent can be installed at this time (Figure 13). It may be necessary to remove the front stand-offs if they interfere with the routing of the flexible ducting.
Combustible and non-combustible facing material may now be installed. Refer to Figure 14 for distribution of facing material. The area above and on either side of the TC42 within the steel frame must (grey area) use Non-combustible facing material. The area outside of the steel frame may use Combustible facing material (Dotted area).

It is important to note that all facing material must be a minimum of 1/2 inch thick. The thickness of the facing material must be calculated into the final position of the TC42 and its steel frame.
Ceiling (May be combustible material)

Upper Grill

Do not place combustible materials such as electronics or artwork below this point.

48”

Figure 15: Side view of upper grill near ceiling.

If desired, the Upper Venting Box may be placed as close to the ceiling as it is possible (Figure 15). It is not necessary for the ceiling to be made with non-combustible material. The heat expelled from the Upper Venting Box is not high enough to damage the ceiling material.

Do not place combustibles such as electronics or artwork within the first 48” from the floor.