



# INSTALLATION INSTRUCTIONS FOR THE THRUWALL™ 2-SPEED PLUS AIRFLOW ADAPTOR PLATES

MODEL: TW408

## READ AND SAVE THESE INSTRUCTIONS: IMPORTANT NOTICE

**WARNING** - To reduce the risk of fire or electric shock, do not use this fan with a solid-state speed control device. With the use of any electrical appliance, it is important to observe all basic precautions to minimize the risk associated with use, such as electrical shock, fire, or injury to persons.

### Read these instructions before using your ThruWall™ 2-Speed Plus Airflow Adaptor Plates.

If you have doubts or are unfamiliar with this type of installation work, seek the services of a qualified contractor. Suncourt assumes no responsibility for installation of the ThruWall™ fan. For your safety and protection follow all instructions and adhere to applicable building and/or electrical codes.

**Not for bathroom use.**

**Do not use in wet or damp locations.**

**Do not use in a window.**

**Do not install in fire rated walls.**

**This fan is not to be installed in an outside wall.**

**Use only a grounded wall outlet.**

**Do not operate any fan with a damaged cord or plug. Discard fan or return to Suncourt for examination and/or repair.**

**Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings.**

**Do not route cord under furniture or appliances. Keep cord away from traffic area and avoid areas where it will be tripped over.**

Instructions are available at [www.suncourt.com](http://www.suncourt.com)

**NEVER EXPOSE YOUR THRUWALL™ TO TEMPERATURES OVER 140°F (60°C)**

**WARNING** - To reduce the risk of fire, electric shock or injury to persons, **Observe The Following:**

1. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
2. When cutting or drilling into wall or ceiling, do not damage electrical wiring or other hidden utilities.
3. Do not use any type of speed control.
4. Keep the unit unplugged until all installation steps are completed to prevent power from being switched on accidentally.

The ThruWall™ fan moves air from room to room quietly and efficiently. Simple to install in any frame wall from 3-3/4" to 6-1/2" thick. A high quality Thermally Protected motor with balanced fan blade moves up to 130 CFM. The ThruWall™ fan moves heated or cooled air between rooms.

## STEP BY STEP INSTALLATION INSTRUCTIONS

The ThruWall™ fan can be placed at any height on the wall. If you want to move predominantly warm air the fan should be placed higher on the wall to capture the warmer air. For colder airflow place the fan lower on the wall. Please keep in mind the 10' power cord. Extension cords are not recommended for use with this fan.

Step 1. Place the metal sleeve (without the grille attached) against the wall with the flanged edge facing you. Trace the pipe on the outside with a pencil to mark the cutout. (Refer to picture 1)

Step 2. Cut out the circular opening with a small drywall saw. Cut inside the pencil line. Take care not to damage the edge of the drywall since you will be installing drywall anchors close to the hole to mount the grille. (Refer to picture 2)

Step 3. Project the edge of the cutout onto the inside of the other wall board in three places, approximately 120° apart. Use a small square or a piece of cardboard that has an exact 90° angle to mark the cutout points on the inside of the other wall. The two circular openings must be accurately aligned. (Refer to picture 3)

Step 4. Use a small sharp pin or very small drill bit (1/32" or smaller) to punch or drill these three marks to the outside of the other wall. (Refer to picture 4)

Step 5. Place the other sleeve, with grille attached, against the outside of the wall and center its location using the three markers that you have made, then trace the outside of the sleeve with a pencil. Cut the circular opening with a small drywall saw. Cut inside the pencil line. Take care not to damage the edge of the drywall. You will be installing drywall anchors close to the hole to mount the grille. (Refer to picture 5)

Step 6. Insert the metal sleeve with grille into the cutout opening (fan output side) and snug the flange up against the wall material, making sure that power cord is hanging straight down. Use a level to square the housing.

Step 7. Insert the other metal sleeve into the cutout opening (fan suction side) and snug the flange up against the wall material.

Step 8. Position the unattached plastic grille over the metal sleeve that was just inserted so that the Suncourt logo is at the bottom. Using a level make sure that the grille is nicely square with the floor. Mark the placement for the 4 wall anchors.

Step 9. Remove metal sleeve with grille attached and drill the holes on both sides of the wall for the anchors with a sharp 3/16" drill bit. Install wall anchors and after re-inserting metal sleeve with grille attached, screw the grilles down snugly. DO NOT OVERTIGHTEN. (Refer to picture 6)

## PLEASE READ THESE INSTRUCTIONS BEFORE STARTING INSTALLATION

- The ThruWall™ can be mounted in any normal drywall or paneled stud construction wall with a 3-3/4" to 6-1/2" total thickness.
- Start by making sure that there are NO studs, water, drain, electrical or other obstruction in the wall where you wish to install the unit. The power cord of the ThruWall™ is 10ft long, please verify that the power cord will reach a 110 Volt AC outlet. The use of extension cords is not recommended. Please see the airflow direction label on the housing.
- The grilles of your ThruWall™ fan may be painted to suit any decor. Thoroughly wash the grilles with mild household detergent, dry completely, and spray with a quality, fast dry, spray paint.
- The installation of your ThruWall™ fan is not difficult, but the cutouts must be accurate.

### In the carton you will find:

- (1) Telescoping metal sleeve with plastic grille attached. This is the output side of the fan.
- (1) Telescoping metal sleeve without plastic grill attached. This is shipped slid over the metal sleeve attached to the plastic grille.
- (1) Loose plastic grille
- (1) Large airflow adaptor - Installed on the output grille
- (2) Small airflow adaptors - (1) Loose, (1) Installed on the inlet grille
- (8) #6 Screws
- (8) Wall anchors

## OPERATION INSTRUCTIONS AND PERFORMANCE:

This ThruWall™ is equipped with a two speed motor and three airflow adaptor plates in two sizes. There is a three position switch on the output side of the fan. The switches: position (I) is low speed, center (O) off, and position (II) is high speed.

\*LOW = Switch on (I) using one small and one large airflow adaptor plate.

MED-LOW = Switch on (I) using the two small airflow adaptor plates.



\*MED - HIGH = Switch on (II) using one small and one large airflow adaptor plate.

HIGH = Switch on (II) using the two small airflow adaptor plates.

## PERFORMANCE

Air changes per hour (ACH) based on room Sq Ft.

Speed Setting	CFM	75	100	125	150	175	200	225	250	275
*Low	90	9.0	6.8	5.4	4.5	3.9	3.4	3.0	2.7	2.5
Med - Low	105	10.5	7.9	6.3	5.3	4.5	3.9	3.5	3.2	2.9
*Med - High	115	11.5	8.6	6.9	5.8	4.9	4.3	3.8	3.5	3.1
High	130	13.0	9.8	7.8	6.5	5.6	4.9	4.3	3.9	3.5

1. Find the square footage on the chart that is closest to the room in which air is to be delivered by the fan.
2. Select your airflow setting based on the chart. For older homes, consider a setting that results in a higher ACH.
3. Areas marked w/  : fan is oversized for this area at this speed setting. Lower speed setting.
4. Areas marked w/  : a single fan may be undersized for this area at this speed setting, particularly older homes with inadequate insulation.

(\* ) The TW408 is shipped from the factory with one large adaptor plate on the outlet side and one small adaptor plate on the inlet side. This corresponds to the “Low” and “Med-High” setting depending on the speed switch. In certain circumstances, moving the large adaptor plate to the inlet side can help reduce noise output.



Pic. 1



Pic. 2



Pic.3



Pic. 4



Pic. 5



Pic. 6

## CLEANING AND MAINTENANCE

Before cleaning the TW408 ThruWall™ fan unplug or switch power off at the appropriate breaker. Dust may be removed from the exterior surfaces using a soft cloth, the round brush attachment of your vacuum cleaner, or using a cloth that has been lightly moistened with water and a mild, non-abrasive detergent.

## ONE YEAR LIMITED WARRANTY

Subject to the following limitations, Suncourt Inc. (manufacturer) warrants that the ThruWall™ fan will, for 1 (one) year from date of original retail purchase, but not exceeding 2 (two) years from date of manufacture, remain free from appearance of defects in workmanship or materials. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, well packaged to avoid damage in transit; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair, or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees, and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this ThruWall™ fan. Ship unit to Suncourt Inc. only after obtaining a Return Goods Authorization (RGA) number. Returns without this RGA number will not be accepted.

Actual product appearance may differ from illustrations.

Suncourt reserves the right to modify any or all of its products' features, designs, components and specifications without notice.

