

# **Ventilation Guide**

REVISED 1/2023



## Contents

- 3 Selecting a Ventilation System
- 8 Determine the Duct Run
- 10 Determine the CFM
- 11 Select a Blower
- 14 Wolf Warranty



Features and specifications are subject to change at any time without notice. Visit wolfappliance.com/specs for the most up-to-date information.

Throughout this guide, dimensions may vary by  $\pm$  ½" (3). Dimensions in parentheses are millimeters unless otherwise specified.

When selecting a ventilation system, start by choosing the proper Wolf ventilation product, determined by the type of cooking appliance used and the following considerations:

- Cooktop or pro ventilation
- Updraft or downdraft
- Width guidelines
- Hood mounting height
- Ceiling height
- Cooking space / cooking style
- Ventilation performance
- Internal, in-line, or remote blower
- **Ducting considerations**
- Electrical requirements
- Recirculating application
- Custom hood application

**IMPORTANT NOTE:** Wolf cooking products do not require ventilation when installed according to the installation instructions. Recommendations and suggestions in this guide are for performance only.

## **COOKTOP OR PRO VENTILATION**

One of the primary considerations in choosing a ventilation product is the type of cooking appliance used. Wolf offers both cooktop ventilation and pro ventilation. Cooktop ventilation includes wall hoods, island hoods, ceiling-mounted hoods, under-cabinet hood inserts, and downdraft systems. Pro ventilation includes wall hoods, island hoods, hood liners, and outdoor wall hoods.

Wolf cooktop ventilation hoods and downdrafts are designed for use with induction, electric, and gas cooktops and modules. Some exceptions apply for downdrafts. The chart below provides a reference of Wolf ventilation products recommended for use with specific Wolf cooking appliances.

Wolf pro ventilation hoods and liners can be used with all cooking appliances, including ranges and rangetops. A downdraft system can also be used with sealed burner rangetop models SRT304 and SRT366. The outdoor wall hood is specifically designed for outdoor use.

An accessory trim kit is required for installation of a contemporary cooktop or sealed burner rangetop with a downdraft. It is available through an authorized Wolf dealer. For local dealer information, visit the find a showroom section of our website, wolfappliance.com.

WOLF VENTILATION	COOKTOP VENTILATION		PRO VENTILATION			
	COOKTOP HOOD	DOWNDRAFT SYSTEM	WALL HOOD	WALL CHIMNEY HOOD	ISLAND HOOD	HOOD LINER
COOKTOPS						
Induction Cooktop	•	•	•	•	•	•
Electric Cooktop	•	•	•	•	•	•
Gas Cooktop	•	•	•	•	•	•
MODULES						
Induction / Electric / Teppanyaki Module	•	•	•	•	•	•
Grill / Steamer / Fryer Module	•		•	•	•	•
Gas / Multifunction Module	•	•	•	•	•	•
RANGES						
Dual Fuel Range			•	•	•	•
Gas Range			•	•	•	•
Induction Range	•		•	•	•	•
RANGETOPS						
Sealed Burner Rangetop (SRT304, SRT366)		•	•	•	•	•
Sealed Burner Rangetop (all other models)			•	•	•	•

## **UPDRAFT OR DOWNDRAFT**

The choice between updraft ventilation and downdraft ventilation will depend on several factors, most notably the cooking appliance, type of installation, and location. Updraft ventilation, or an overhead hood, is typically a more effective ventilation option. Cooking vapors naturally rise, making it easier to collect and remove them from the cooking area.

With downdraft systems, a telescopic downdraft chimney rises up from the countertop and draws cooking vapors away from the cooking surface. Downdraft ventilation is a great option in installations where an overhead hood is not desired or is not a viable option.

#### **WIDTH GUIDELINES**

For wall installations, the width of the hood should be at least as wide as the cooking surface. Where space is not restricted, a wider hood can be used to increase the capture area.

Island and peninsula installations require a greater capture area. Island hoods should exceed the width of the cooking surface by a minimum of 3" (76) on each side.

For downdraft ventilation systems, the width of the downdraft should match the width of the cooktop.

## HOOD MOUNTING HEIGHT

Proper mounting height is very important. If a ventilation hood is mounted too low, access to the cooking surface may be restricted. If a hood is mounted too high, performance may be compromised.

For optimal performance, pro hoods should be mounted 30" (762) to 36" (914) from the bottom of the hood to the counterop. The ceiling-mounted hood should be mounted 36" (914) to 84" (2114) from the bottom of the hood to the countertop. The cooktop hood and under-cabinet hood insert should be mounted 24" (610) to 36" (914) from the bottom of the hood to the countertop. The outdoor wall hood should be mounted 36" (914) to 42" (1067) from the bottom of the hood to the countertop.

#### **CEILING HEIGHT**

Before selecting a Wolf ventilation hood, check the installation site for adequate ceiling height, or any extra space that may remain after proper installation of the hood and cooking appliance. This can be determined by adding the floor-to-countertop height, plus the recommended hood mounting height (bottom of the hood to the countertop), plus the height of the hood.

Excess ceiling height can be filled using an accessory flue extension or a stainless steel duct cover for pro hoods. The space can also be adjusted by raising or lowering the hood within the specified mounting height.

#### **COOKING SPACE / COOKING STYLE**

The appropriate airflow capacity is determined by the cooking space and cooking style. If the cooking surface is in an island or peninsula, a higher airflow capacity hood can provide better capture for cross currents, or if the hood needs to be mounted higher. Downdraft ventilation may also be an option.

Greater exhaust capacity is required to handle the moisture generated by boiling large pots of water or the grease and smoke from grilling or frying. Cooking with high heat or cooking aromatic foods may require additional CFM and increasing the capture area by using a hood that exceeds the cooking surface by 3" (76) on each side.

#### **VENTILATION PERFORMANCE**

Ventilation performance is measured in cubic feet per minute, or CFM. The higher the CFM, the greater the amount of air that is evacuated through the ventilation system. CFM suggestions are based on the cooking appliance output.

## INTERNAL, IN-LINE, OR REMOTE BLOWER

All Wolf ventilation products are shipped without the blower assembly. An internal, in-line, or remote blower must be selected to accommodate the cooking appliance and ventilation product.

The blower will vary in size (CFM), which is dictated by the cooking surface, the volume of air that needs to be moved, and the length of the duct run.

Internal blowers are mounted inside the hood canopy or blower box and provide the least disruption to the exterior of the home.

In-line blowers are connected to the duct run between the hood and the exterior of the home. This is a great option if mounting the blower inside the hood or on the exterior of the home is not desired or is not a viable option.

Remote blowers can be mounted on the roof or, in some cases, on an exterior wall. A remote-mounted blower will minimize the amount of blower noise but will not eliminate the noise completely. If noise is a concern, a remote blower is recommended.

Internal, in-line, and remote blowers are available for all Wolf cooktop and pro ventilation products except the under-cabinet hood inserts which offer only an internal blower option.

#### **DUCTING CONSIDERATIONS**

IMPORTANT NOTE: Unless used in a recirculating application, Wolf ventilation hoods and downdrafts must be vented to the outside. Use only rigid metal ducting.

Typically, wall-mounted ventilation hoods can be vertical or horizontal discharge, while wall chimney hoods, island hoods, hood liners, and outdoor wall hoods are vertical discharge only. For some wall hoods, an accessory horizontal discharge kit is required. In a horizontal discharge application, additional framework may be needed to accommodate the remote blower. Wolf downdraft systems have an adjustable discharge that will allow you to negotiate ducting around floor joists and other obstacles.

Depending on the specific installation, ducting can run through the roof, external wall, or eave. A remote blower can not be ducted through an eave.

A straight, short duct run with a limited number of elbows and transitions will allow the hood or downdraft to perform most efficiently. Wolf ventilation hoods will operate most efficiently when the duct run does not exceed 50' (15 m) in length, 40' (12 m) for downdrafts. To calculate the total duct length, refer to page 8.

#### **ELECTRICAL REQUIREMENTS**

All Wolf ventilation products require a separate grounded electrical supply. Installation must comply with all applicable electrical codes.

For all hoods except the outdoor wall hood, a ground fault circuit interrupter (GFCI) is not recommended and may cause interruption of operation. For the outdoor wall hood, a ground fault circuit interrupter is required to reduce the risk of electrical shock.

## RECIRCULATING APPLICATION

Recirculating units recycle the air through a charcoal filter and return it to the kitchen. This type of ventilation will not remove heat, moisture, or combustion gases from the air. It will also be less effective in reducing odors and smoke. Recirculating units should only be used in applications where ducting to the outside is not an option, and only if local codes allow it.

Wolf recirculating units are for use with cooktop hoods and downdrafts with an internal blower and some pro wall hood models. Recirculating units should not be used with ranges or rangetops that contain a charbroiler or griddle.

#### **CUSTOM HOOD APPLICATION**

A custom decorative hood, used with pro hood liners, can be created out of wood, plaster, tile, or metal to match virtually any design theme. The shape of the decorative hood is not critical as long as the hood liner fits completely inside the hood. The decorative hood and liner must fit together at the bottom edge in both width and depth. The height of the hood does not have to match the height of the liner.

## **Ventilation Made Easy**

After choosing the proper ventilation hood or downdraft, follow this three-step process to determine your blower needs to complete the ventilation system:

- Step 1: Determine the Duct Run
- Step 2: Determine the CFM
- Step 3: Select a Blower

## Step 1: Determine the Duct Run

**IMPORTANT NOTE:** Consult a qualified HVAC professional for specific installation and ducting applications.

Check local codes: Consult a qualified HVAC professional to ensure all applicable codes are followed. Refer to the installation guide for your specific Wolf ventilation product.

Minimize the duct run: The length of the duct run and number of elbows and transitions can have a significant effect on ventilation performance. Keep the duct run as short as possible and limit the number of elbows and transitions. Do not use flexible metal ducting.

Elbows and transitions: Do not place elbows and transitions back-to-back. Whenever possible, include a minimum 15" (381) straight ducting between elbows and transitions to increase ventilation performance.

Use recommended duct sizes: Depending on the specific ventilation product, Wolf recommends 6" (152), 8" (203), or 10" (254) ducting. Smaller duct sizes will significantly reduce ventilation performance.

Cold weather installations: Cold weather installations may require an additional backdraft damper to minimize backward flow of cold air. All Wolf ventilation hoods, except low-profile wall hoods, come with a backdraft damper connected to the transition. Downdraft systems do not have a backdraft damper.

High altitudes: Ventilation systems are less effective at altitudes above 5,000' (1524 m). At these altitudes, you should estimate a 20-25% reduction in CFM performance. A higher CFM blower and increasing the duct size is recommended.

Make-up air: Make-up air may be required to replace air removed by the ventilation system. Consult a qualified HVAC professional for specific applications.

Equivalent duct length: Determine the equivalent length of the duct run using the equivalent duct lengths for commonly used ducting listed in the chart on the following page. Follow these steps and use the chart to calculate the equivalent duct length:

- 1 Compute the length of all straight ducting.
- 2 Compute the equivalent duct length of all elbows, transitions and caps.
- 3 Add equivalent lengths for all sections of the duct run.

# Step 1: Determine the Duct Run

## **EQUIVALENT DUCT LENGTH**

DUCTING	SIZE	EQUIVALENT LENGTH	QUANTITY	TOTAL
1' (.3 m) STRAIGHT DUCTING	6" (152) round	4' (1.2 m)		
	8" (203) round	1' (.3 m)		
	10" (254) round	.3' (.1 m)		
	3½" (83) x 10" (152)	4' (1.2 m)		
90° ELBOW	6" (152) round	24' (7.3 m)		
	8" (203) round	7' (2.1 m)		
	10" (254) round	3' (.9 m)		
	3½" (83) x 10" (152)	12' (3.7 m)		
45° ELBOW	6" (152) round	12' (3.7 m)		
	8" (203) round	4' (1.2 m)		
	10" (254) round	2' (.6 m)		
	3½" (83) x 10" (152)	8' (2.4 m)		
ROUND TO RECTANGULAR TRANSITION	6" (152) round to 3 <sup>1</sup> / <sub>4</sub> " (83) x 10" (152)	5' (1.5 m)		
	8" (203) round to 31/4" (83) x 10" (152)	1' (.3 m)		
	3½" (83) x 10" (152) to 6" (152) round	12' (3.7 m)		
	3½" (83) x 10" (152) to 8" (203) round	16' (4.9 m)		
ROUND TO ROUND TRANSITION	6" (152) round to 8" (203) round	4' (1.2 m)		
	8" (203) round to 10" (254) round	1' (.3 m)		
	8" (203) round to 6" (152) round	12' (3.7 m)		
	10" (254) round to 8" (203) round	3' (.9 m)		
ROOF CAP OR WALL CAP	6" (152) round	60' (18.3 m)		
	8" (203) round	20' (6.1 m)		
	10" (254) round	9' (2.7 m)		
	3½" (83) x 10" (152)	60' (18.3 m)		
	TOTAL EQUIVALENT LENGTH			

# Step 2: Determine the CFM

Ventilation performance is measured in cubic feet per minute, or CFM. The chart below provides CFM suggestions specific to the Wolf cooking appliance and ventilation system used. To maximize airflow and performance, specify a blower to match or exceed the CFM listed.

Additional CFM may be required for long duct runs and ranges or rangetops with a charbroiler or griddle. When determining the proper CFM for your installation, take into consideration the equivalent duct length calculated in Step 1.

IMPORTANT NOTE: Consult a qualified HVAC professional for specific applications.

WOLF PRODUCT CFM	COOKTOP HOOD	DOWNDRAFT	PRO HOOD
COOKTOP / MODULE			
CI152TF/S CE152TF/S CG152TF/S	300	600	300
SM15TF/S FM15TF/S GM15TF/S	300		300
TM15TF/S MM15TF/S	300	600	300
CI243TF/S CI243C/B CG243TF/S	300		300
CI30460T/S CI30460C/B CI304TF/S CI304T/S CI304C/B	300	600	300
CE304T/S CE304C/B	300	600	300
CG304T/S CG304P/S	300	600	300
CI36560T/S CI36560C/B CI365TF/S CI365T/S CI365C/B	300	600	300
CE365T/S CE365C/B	300	600	300
CG365T/S CG365P/S CG365C/S	300	600	300
DUAL FUEL RANGE			
DF30450/S/P			500
DF36650/S/P DF36450C/S/P DF36450G/S/P			800
DF48850/S/P DF48650C/S/P DF48650G/S/P DF48450CG/S/P DF48450DG/S/P DF48450F/S/P			1100
DF60650CG/S/P DF60650DG/S/P DF60650F/S/P			1500
GAS RANGE			
GR304			500
GR366 GR364C GR364G			800
GR488 GR486C GR486G GR484CG GR484DG			1100
GR606CG GR606DG GR606F			1500
INDUCTION RANGE			
IR30450/S/T IR30450/S/P	300		300
IR36550/S/T IR36550/S/P	300		300
SEALED BURNER RANGETOP			
SRT304		600	500
SRT366		600	800
SRT364C SRT364G SRT362W			800
SRT486C SRT486G SRT484CG SRT484DG SRT484F SRT484W			800

## Step 3: Select a Blower

All Wolf ventilation products are shipped without the blower assembly. An internal, in-line, or remote blower must be selected to accommodate the cooking appliance and ventilation product. Wolf ventilation products must be installed only with a Wolf blower.

Wolf blower assemblies are available through an authorized Wolf dealer. For local dealer information, visit the find a showroom section of our website, wolfappliance.com. Installation instructions shipped with each blower provides detailed specifications.

The charts on the following pages provide internal, in-line, and remote blower options for all Wolf ventilation products.

Step 3: Select a Blower

INTERNAL BLOWER (CFM)	300 INT*	400 INT*	500 INT	600 INT	800 INT	1200 INT
СООКТОР НООД						
VW30B VW36B VW45B VI42B	•			•		
VW30S VW36S VI42S	•			•		
VW36G VW45G VI45G	•			•		
CEILING-MOUNTED HOOD						
VC36S VC36W VC48S VC48W				•		
UNDER-CABINET HOOD INSERT						
VU24S VU30S	•			•		
DOWNDRAFT						
DD30 DD36 DD45				•		
PRO LOW-PROFILE WALL HOOD						
PW302210 PW362210			•			
PW422210 PW482210			•			
PRO 24" WALL HOOD						
PW302418 PW362418 PW422418	•	•		•	•	•
PW482418 PW542418	•	•		•	•	•
PW602418 PW662418	•	•		•	•	•
PRO 27" WALL HOOD						
PW302718 PW362718 PW422718	•	•		•	•	•
PW482718 PW542718	•	•		•	•	•
PW602718 PW662718	•	•		•	•	•
PRO WALL CHIMNEY HOOD						
PWC362418 PWC422418	•	•		•	•	•
PWC482418 PWC542418	•	•		•	•	•
PRO ISLAND HOOD						
PI363418 PI423418	•	•		•	•	•
PI543418	•	•		•	•	•
PI663418	•	•		•	•	•
PRO HOOD LINER						
PL341912 PL342212 PL401912 PL402212	•	•		•	•	•
PL461912 PL462212	•	•		•	•	•
PL521912 PL522212	•	•		•	•	•
PL581912 PL582212	•	•		•	•	•
OUTDOOR WALL HOOD						
PW363318O PW483318O PW603318O						•

<sup>\*</sup>For make-up air restricted applications. Capture and performance may be reduced.

Step 3: Select a Blower

IN-LINE / REMOTE BLOWER (CFM)	600 IL	1100 IL	600 REM	900 REM	1500 REM
сооктор ноор					
VW30B VW36B VW45B VI42B	•		•		
VW30S VW36S VI42S	•		•		
VW36G VW45G VI45G	•		•		
CEILING-MOUNTED HOOD					
VC36S VC36W VC48S VC48W	•		•		
UNDER-CABINET HOOD INSERT					
VU24S VU30S					
DOWNDRAFT					
DD30 DD36 DD45	•		•		
PRO LOW-PROFILE WALL HOOD					
PW302210 PW362210	•	•	•	•	•
PW422210 PW482210	•	•	•	•	•
PRO 24" WALL HOOD					
PW302418	•	•	•	•	•
PW362418 PW422418 PW482418 PW542418	•	•	•	•	•
PW602418 PW662418	•	•	•	•	•
PRO 27" WALL HOOD					
PW302718	•	•	•	•	•
PW362718 PW422718 PW482718 PW542718	•	•	•	•	•
PW602718 PW662718	•	•	•	•	•
PRO WALL CHIMNEY HOOD					
PWC362418 PWC422418	•	•	•	•	•
PWC482418 PWC542418	•	•	•	•	•
PRO ISLAND HOOD					
PI363418 PI423418	•	•	•	•	•
PI543418	•	•	•	•	•
PI663418	•	•	•	•	•
PRO HOOD LINER					
PL341912 PL342212 PL401912 PL402212	•	•	•	•	•
PL461912 PL462212	•	•	•	•	•
PL521912 PL522212	•	•	•	•	•
PL581912 PL582212	•	•	•	•	•
OUTDOOR WALL HOOD					
PW363318O PW483318O PW603318O		•			•

W

## Wolf Appliance Residential Limited Warranty

## FOR RESIDENTIAL USE

#### **FULL TWO YEAR WARRANTY\***

For two years from the date of original installation, this Wolf Appliance product warranty covers all parts and labor to repair or replace, under normal residential use, any part of the product that proves to be defective in materials or workmanship. All service provided by Wolf Appliance under the above warranty must be performed by Wolf Factory Certified Service, unless otherwise specified by Wolf Appliance, Inc. Service will be provided during normal business hours.

#### LIMITED FIVE YEAR WARRANTY

For five years from the date of original installation, Wolf Appliance will repair or replace the following parts that prove to be defective in materials or workmanship: gas burners (excludes appearance), electric heating elements, blower motors (ventilation hoods), electronic control boards, magnetron tubes and induction generators. If the owner uses Wolf Factory Certified Service, the service provider will repair or replace these parts with the owner paying for all other costs, including labor. If the owner uses non-certified service, the owner must contact Wolf Appliance, Inc. (using the information below) to receive repaired or replacement parts. Wolf Appliance will not reimburse the owner for parts purchased from non-certified service or other sources.

#### TERMS APPLICABLE TO EACH WARRANTY

The warranty applies only to products installed for normal residential use. The warranty applies only to products installed in any one of the fifty states of the United States, the District of Columbia or the ten provinces of Canada. This warranty does not cover any parts or labor to correct any defect caused by negligence, accident or improper use, maintenance, installation, service or repair.

THE REMEDIES DESCRIBED ABOVE FOR EACH WARRANTY ARE THE ONLY ONES THAT WOLF APPLIANCE, INC. WILL PROVIDE, EITHER UNDER THIS WARRANTY OR UNDER ANY WARRANTY ARISING BY OPERATION OF LAW. WOLF APPLIANCE, INC. WILL NOT BE RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE BREACH OF THIS WARRANTY OR ANY OTHER WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights that vary from state to state.

To receive parts and/or service and the name of Wolf Factory Certified Service nearest you, contact Wolf Appliance, Inc., P.O. Box 44848, Madison, WI 53744; check the Product Support section of our website, wolfappliance.com, email us at customerservice@ subzero.com or call 800-222-7820.

\*Stainless steel (doors, panels, handles, product frames and interior surfaces) are covered by a limited 60-day parts and labor warranty for cosmetic defects

\*Replacement filters for ventilation hood recirculating kits are not covered by the product warranty.



## Wolf Appliance Outdoor Limited Warranty\*

## FOR RESIDENTIAL USE

#### **FULL ONE YEAR WARRANTY\*\***

For one year from the date of original installation, this Wolf Appliance product warranty covers all parts and labor to repair or replace, under normal residential use, any part of the product that proves to be defective in materials or workmanship. All service provided by Wolf Appliance under the above warranty must be performed by Wolf Factory Certified Service, unless otherwise specified by Wolf Appliance, Inc. Service will be provided during normal business hours.

#### LIMITED FIVE YEAR WARRANTY

For five years from the date of original installation, Wolf Appliance will repair or replace the following parts that prove to be defective in materials or workmanship: stainless steel briquette trays, gas valves, drip pans, electronic control boards and electric heating elements. If the owner uses Wolf Factory Certified Service, the service provider will repair or replace these parts with the owner paying for all other costs, including labor. If the owner uses non-certified service, the owner must contact Wolf Appliance, Inc. (using the information below) to receive repaired or replacement parts. Wolf Appliance will not reimburse the owner for parts purchased from non-certified service or other sources.

#### LIMITED LIFETIME WARRANTY

For the life of the product, Wolf Appliance will repair or replace the following parts that prove to be defective in materials or workmanship: all stainless steel components (excludes surface corrosion, scratches, discoloration, weather and atmospheric related staining and minor surface rust and oxidation). If the owner uses Wolf Factory Certified Service, the service provider will repair or replace these parts with the owner paying for all other costs, including labor. If the owner uses non-certified service, the owner must contact Wolf Appliance, Inc. (using the information below) to receive repaired or replacement parts. Wolf Appliance will not reimburse the owner for parts purchased from non-certified service or other sources.

## TERMS APPLICABLE TO EACH WARRANTY

The warranty applies only to products installed for normal residential use. The warranty applies only to products installed in any one of the fifty states of the United States, the District of Columbia or the ten provinces of Canada. This warranty does not cover any parts or labor to correct any defect caused by negligence, accident or improper use, maintenance, installation, service or repair.

THE REMEDIES DESCRIBED ABOVE FOR EACH WARRANTY ARE THE ONLY ONES THAT WOLF APPLIANCE, INC. WILL PROVIDE, EITHER UNDER THIS WARRANTY OR UNDER ANY WARRANTY ARISING BY OPERATION OF LAW. WOLF APPLIANCE, INC. WILL NOT BE RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE BREACH OF THIS WARRANTY OR ANY OTHER WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights that vary from state to state.

To receive parts and/or service and the name of Wolf Factory Certified Service nearest you, contact Wolf Appliance, Inc., P.O. Box 44848, Madison, WI 53744; check the Product Support section of our website, wolfappliance.com, email us at customerservice@ subzero.com or call 800-222-7820.

\*Product must be approved for outdoor use, designated by model and serial number.

\*\*Stainless steel (doors, panels, handles, product frames and interior surfaces) are covered by a limited 60-day parts and labor warranty for cosmetic defects.



