## MODERN FORMS SMART FANS

# ROBOTO 52" - 62"

FR-W1910-52L/FR-W1910-62L

**INSTALLATION INSTRUCTIONS** 

modernforms.com

















### All Modern Forms fans are:



WFT



SMART



Durably finished and rated for indoor and outdoor use

Integrates with smart devices for remote and voice activated control

Wet location-listed and manufactured to the strictest ETL/cETL safety regulations



Quiet, reliable, and up to 70% more efficient than AC fans



Wi-Fi and RF enabled for unlimited control options

App Instructions And Smart Home Device Integration



modernforms.com/mfappins



### FREE APP DOWNLOAD

Sync with our exclusive Modern Forms app to control fan speed, use smart features like Adaptive Learning, create groups and reduce energy costs







### RF Wall Control F-WC-WT

Included with each fan 6 Fan speeds Dims light to 1% ON/OFF



WIFI Touch Panel Wall Control F-TS-BK Black F-TS-WT White Sold separately Full app control

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### 1. Safety Rules

For operation, maintenance, and troubleshooting information, visit modernforms.com/help.

- To reduce the risk of electric shock, ensure electricity has been turned off at the circuit breaker before beginning.
- All wiring must be in accordance with the National Electrical Code "ANSI/NFPA 70" and local electrical codes. Electrical installation should be performed by a licensed electrician.
- 3. To reduce the risk of fire, electric shock, personal injury or damage to the fan or other items, the outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 35 lbs (15.9 kg). Use only UL/cUL listed outlet boxes marked "FOR FAN SUPPORT." Use only the screws and washers provided with the outlet box.
- 4. The fan must be mounted with a minimum of 7 ft. (2.1m) clearance from the trailing edge of the fan blades to the floor and a minimum of 1.5 ft (0.5m) from the edge of the fan blades to the surrounding walls.
- 5. Never place objects in the path of the fan blades.

- 6. To avoid personal injury or damage to the fan and other items, please be cautious when working around or cleaning the fan.
- 7. To avoid electrical shock or damage to the motor or finish, do not use water or chemicals when cleaning the fan or fan blades. A dry cloth or lightly dampened cloth will be suitable for most cleaning.
- After making electrical connections, spliced conductors should be turned upward and pushed carefully up into the outlet box. The wires should be spread apart with the grounded conductor and the equipment-grounding conductor on one side of the outlet box, and the ungrounded conductor on the other side of the outlet box.
- 9. All set screws must be checked and re-tightened where necessary before installation.

**WARNING**: Do not install or use your fan if any part(s) is/are damaged or missing. This product is designed for use only with the supplied parts and/or accessories designated for use with this product by Modern Forms. Substitution of parts or accessories not designated for use with this product by Modern Forms could result in personal injury or property damage and will void the warranty. Contact an authorized dealer or the manufacturer if any parts are damaged or missing.

**WARNING:** To reduce the risk of electric shock, this fan must be installed and operated with the supplied wall control, or controlled from the Modern Forms app or Wi-Fi Touch Panel Wall Control (not included).

**WARNING:** Do not use power tools to assemble or install your fan. Using power tools can result in improper assembly which can lead to noise or fan damage, personal injury or property damage.

**WARNING**: To reduce the risk of personal injury, do not bend the blade arms when installing the brackets, balancing the blades or cleaning the fan.

**WARNING**: Do not insert foreign objects between rotating fan blades.

**WARNING**: Do not operate fan unless fan blades are in place. Noise and fan damage can occur

**WARNING:** This appliance is not intended for use by young children without supervision.

**CAUTION**: Before assembling your fan, refer to the "Making the Electrical Connections" section. If you feel you do not have enough wiring knowledge or experience, have your fan installed by a licensed electrican.

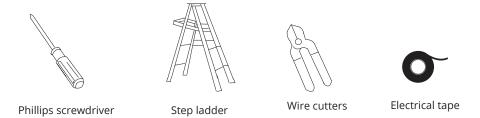
**NOTE**: Before servicing or cleaning the fan, switch power off at the circuit breaker.

### 2. FTC Energy Guide & Specifications

FAN	FAN SIZE	VOLTS	N.W (lbs)	G.W (lbs)	STANDARD	ELECTRICITY	AIR FLOW	ENERGY COSTS*	FAN EFFICACY				
	52"	11 52		11.53	11 50 1	11 50	11 50	12.28	High Speed	37.5W	5194 CFM	\$11/yr	138 CFM/W
DODOTO	32	120	11.33   12.26	\$8/yr	119 CFM/W								
ROBOTO	62"	120		1407	High Speed	34W	6384 CFM	\$10/yr	188 CFM/W				
	62"			14.07	Weighted Average	25W	4209 CFM	\$7/yr	168 CFM/W				

NOTE: These are approximate measures. They do not include amps and wattage used by the light kit.

### 3. Tools And Materials Required



**IMPORTANT:** Please make note of the MAC ID on the receiver and keep it in a safe place.

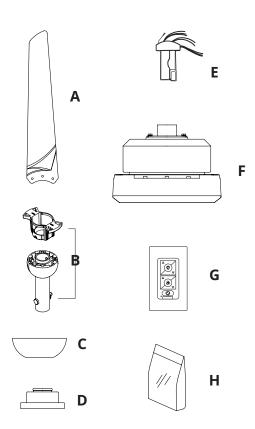
**NOTE:** Before discarding packaging materials, be certain all parts have been removed.

**NOTE:** Place the parts from the hardware bag into a small container to keep them from being lost.

**4. Package Contents**Unpack your fan and check the contents. You should have the following items:

REF.	DESCRIPTION	PART NO.		
Α	Blade Set of 3 (52")	RPL-F1910-52-BD-**		
	Blade Set of 3 (62")	RPL-F1910-62-BD-**		
В	Hanger Assembly			
	Mounting Bracket	RPL-HGR-ASM-**		
	Downrod Assembly			
С	Canopy & Canopy screw ring	RPL-CAN-CYL-**		
D	Coupling cover	RPL-COU-CVR-**		
E	Control receiver w/Hardware (52")	RPL-F1910-62-REC		
	Control receiver w/Hardware (62")	RPL-F1910-62-REC		
F	Motor Assembly			
G	Wall Control w/Hardware	F-WC-WT		
Н	Hardware Bag			
	wood screw (2pcs), screws (2pcs)			
	5/32" lock washers (2pcs) flat washers (2pcs)	RPL-ROBOTO-PARTS		
	5.4mm lock washers (2pcs), wire nuts (3pcs)			
	w/ Blade attachment hardware			
	screws with rubber washers (7pcs)			
	Decorative Plug			

NOTE: \*\* denotes finish code of fan



### 5. Mounting Options

**CAUTION:** To prevent electrical shock, ensure electricity has been turned off at the circuit breaker before beginning.

If there isn't an existing UL/cUL listed outlet box, please refer to the following instructions. Secure the outlet box directly to the building structure. Use appropriate fasteners and building materials. The outlet box and support structure must be able to fully support the moving weight of the fan (at least 35 lbs/15.9 kg). Do not use plastic outlet boxes. Use only UL/cUL listed outlet boxes marked "FOR FAN SUPPORT."

Secure the outlet box directly to the building structure. Use appropriate fasteners and building materials. The outlet box and its support must be able to fully support the moving weight of the fan (at least 35 lbs). Do not use plastic outlet boxes.

Figures 1-4 are examples of different ways to mount the outlet box.

**NOTE:** To hang your fan where there is an existing fixture but no ceiling joist, you may need an installation hanger bar. **NOTE:** Downrod fans can be suspended up to a maximum recommended length of 72" using additional downrods (sold separately) and the included 80" lead wire. **NOTE:** The sloped ceiling kit (sold separately) is required for sloped ceiling applications, and will accommodate slopes up to 45° (**FIG.3**). **NOTE:** You may need a longer downrod to maintain proper blade clearance when installing on a steep, sloped ceiling (**FIG. 3**).

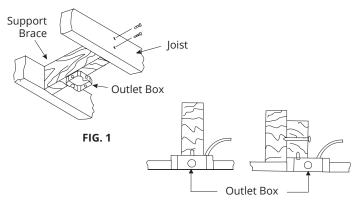


FIG. 2

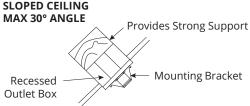
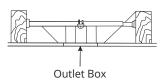


FIG. 3



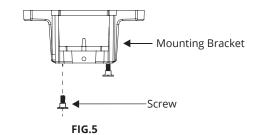
**FIG. 4** FR-W1910-52/62I

### 6. Installing The Mounting Bracket

**Remember to** disconnect the power at the circuit breaker.

- Remove 1 of 2 screws from the bottom of the mounting bracket and save for use in section 11. Loosen the other screw (FIG.5).
- 2. Pass the 120-volt supply wires through the center hole in the mounting bracket as shown (**FIG.6**).
- 3. Secure the mounting bracket to the ceiling outlet box with the screws and washers provided with your outlet box.

**NOTE:** Make sure that mounting screws are tight.



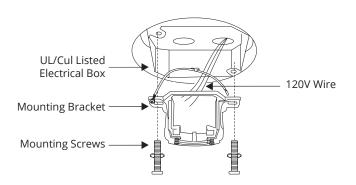


FIG.6

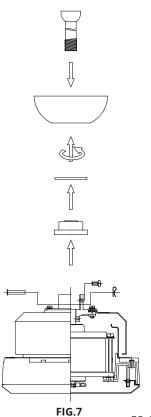
### 7. Hanging The Fan

Assemble upper housing to motor assembly using the 6 screws provided (**FIG.7**).

- Take out the screw located in the hanger ball, lower the hanger ball and remove the cross pin. Remove the hanger ball from the hanger ball/downrod assembly.
- Remove the clevis pin and cotter pin and loosen the two collar screws from the motor collar.
- 3. Feed motor wires and safety cable through coupling cover, canopy ring, and canopy.
- Carefully feed the motor wires and safety cable up through the downrod. Thread the downrod assembly onto motor collar.
- 5. Align the holes of the downrod and collar and insert the cotter pin and clevis pin. Tighten the two collar screws.
- 6. Slip the coupling cover, canopy screw ring (painted side down), and canopy (opened side up) onto the downrod.
- 7. Reinstall the hanger ball onto the downrod, being sure that the cross pin is in the correct position and the screw is tightened.

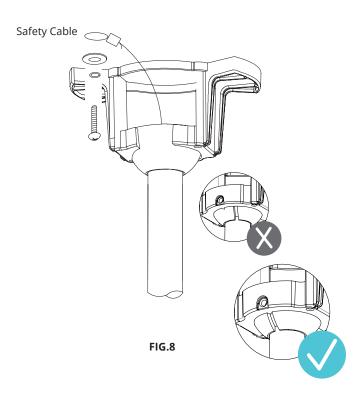
**WARNING:** Failure to properly install the cotter pin and/or tighten the set screws could result in the fan loosening and possibly falling. Take special care to make sure the cotter pin is reattached.

**NOTE:** Make sure all screws are tightened and that wires are not twisted.



### 7. Hanging the Fan (cont.)

- Carefully lift the fan motor assembly up to the mounting bracket and seat the hanger ball in the mounting bracket socket. Make sure the tab on the mounting bracket socket is properly seated in the groove in the hanger ball. Rotate the socket assembly until the ball drops and locks into the hanger bracket screw.
- Secure the safety cable to the building structure using spring washer, flat washer, and wood screw provided (FIG.8).



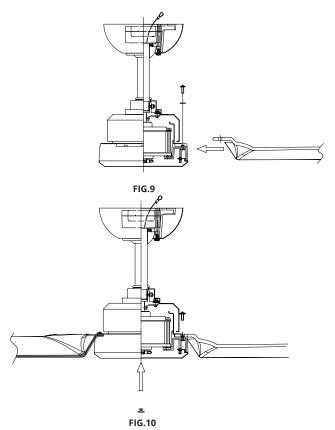
### 8. Attaching The Fan Blades

- Place blade on motor as shown (FIG.9) and secure with the blade attachment screws and washers.
- 2. Repeat this procedure with the remaining blades.

### **Attaching Decorative Plug**

 Press decorative plug into center hole of bottom housing (FIG.10).

**NOTE:** Decorative plug is for indoor applications only.



### 9. Making the Electrical Connections

**Remember** to disconnect the power at the circuit breaker.

**CAUTION:** If you feel you do not have enough wiring knowledge or experience, have your fan installed by a licensed electrician.

**NOTE:** Installation of this fan requires that a three-conductor cable (including ground wire) be run between ceiling and wall outlet boxes.

1. Insert the receiver into the mounting bracket with the flat side of the receiver facing the ceiling (**FIG.11**).

Follow the steps on the next page to connect the fan to your household wiring. Use the included plastic wire nuts with your fan. Secure the plastic wire nuts with electrical tape. Make sure there are no loose strands or connections.

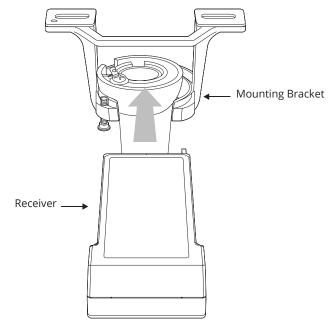


FIG. 11

### 9. Making the Electrical Connections (cont.)

### Motor to receiver electrical connections: (FIG.12)

 Connect the hanger ball/downrod assembly ground wire, mounting bracket ground wire and receiver ground wire to the ground wire in the ceiling outlet box.

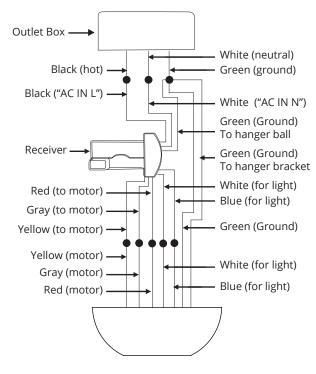
**WARNING:** Failure to connect ground wires could result in poor fan control functionality.

- Connect the red wire from the fan to the red wire marked "TO MOTOR" from the receiver.
- 3. Connect the gray wire from the fan to the gray wire marked "TO MOTOR" from the receiver.
- Connect the yellow wire from the fan to the yellow wire marked "TO MOTOR" from the receiver.
- 5. Connect the white wire from the fan to the white wire marked 'FOR LIGHT" from the receiver.
- Connect the black wire from the fan to the black wire marked "FOR LIGHT" from the receiver.

Receiver to house supply wires electrical connections (FIG.12):

- 1. Connect the black (hot) wire from the ceiling outlet box to the black wire marked "AC in L" from the receiver.
- Connect the white (neutral) wire from the ceiling outlet box to the white wire marked "AC in N" from the receiver.

**WARNING:** Check to see that all connections are tight, including ground, and that no bare wires are visible at the plastic wire nuts except for the ground wire.



**FIG.12** 

### 10. Installing the Wall Control

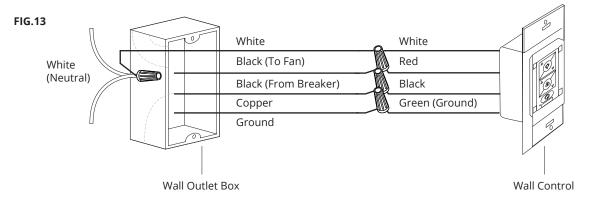
**Remember** to disconnect the power at the circuit breaker.

**NOTE:** Wall control is intended for indoor installation only.

You can control your fan with up to 4 wall controls or remotes (including the pre-paired control).

Wall control to wall outlet box electrical connections (FIG.13):

- 1. Connect the green wire marked "GROUND" from the wall control to the copper wire from the wall outlet box that feeds back to the circuit breaker important for proper fan function.
- 2. Connect the black wire marked "LINE IN" from the wall control to the black LINE VOLTAGE wire from the wall outlet box that feeds back to the circuit breaker.
- 3. Connect the red wire from the wall control to the black wire from the wall outlet box that feeds up to the fan.
- 4. Connect the white wire from the wall control to the white (neutral) wire from the wall outlet box.



### 10. Installing the Wall Control (cont.)

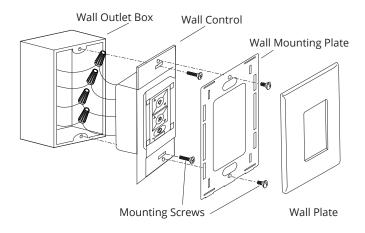
**Remember** to disconnect the power at the circuit breaker.

- Carefully tuck the wire connections inside the outlet box. Secure the wall control with the 2 wall control screws provided (FIG.14).
- 2. Attach the wall mounting plate over the wall control and secure with the 2 wall mounting plate screws provided.
- 3. Fasten the wall plate to the wall mounting plate.

**NOTE:** Fan(s) are required to be installed within 30 feet of the wall control to ensure reliable communication.

**NOTE:** A maximum of 2 fans can operate on a circuit through the wall control.

**NOTE:** A maximum of 12 fans can operation through an on/off switch or breaker when utilizing the Modern Forms app for the fan control (without the wall control in the circuit).

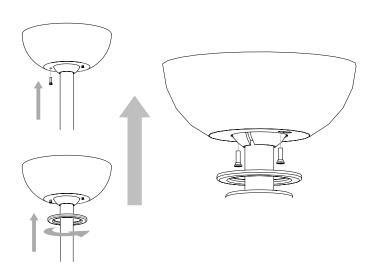


**FIG.14** 

### 11. Finishing the Installation

- 1. Secure all wire connections with supplied wire ties to assist in canopy installation.
- 2. Tuck connections neatly into ceiling outlet box.
- Slide the canopy up to mounting bracket and place the key hole on the canopy over the screw on the mounting bracket.
   Turn canopy until it locks in place at the narrow section of the key holes (FIG.15).
- 4. Align the circular hole on canopy with the remaining hole on the mounting bracket. Secure by tightening the one screw previously loosened and the one previously removed.
- 5. Adjust the canopy screws as necessary until the canopy and canopy screw ring are snug.

**WARNING**: Make sure tab at bottom of hanger bracket is properly seated in groove of hanger ball before attaching canopy to bracket. Failure to properly seat tab in groove could cause damage to electrical wiring.



**FIG.15** 

### 14. Wall Control Operating Instructions

Restore power to ceiling fan and test wall control as below for proper operation.

### Pairing the wall control to your fan

Your fan is pre-paired at the factory. No pairing is necessary.

**NOTE:** For pairing instructions please skip to the "Pairing" section.

### **Wall Control Button Functions**

button: Turns the light ON or OFF.

Press or hold  $\triangle$  to increase the light level.

Press or hold  $\nabla$  to decrease the light level.

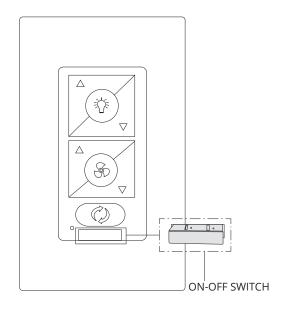
button: Turns the fan ON or OFF.

Press or hold the  $\triangle$  button to increase fan speed.

**NOTE:** Your fan features 6 speeds. An audible tone will indicate when the speed is increased or decreased. When the fan has reached the minimum/maximum speed level the audible indication will stop.

button: Switch between Summer Mode and Winter Mode.

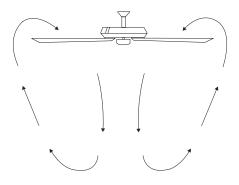
**ON-OFF** Switch: Pull tab to power off in case of emergency. Not necessary for normal fan operation.



### 14. Wall Control Operating Instructions (cont.)

### Summer Mode

(counter-clockwise): A downward airflow creates a cooling effect (**FIG.16**). This allows you to set your air conditioner on a warmer setting without affecting your comfort.



### FIG.16

### Winter Mode

(clockwise): An upward airflow moves warm air off the ceiling area and redistributes the warm air that hovers around the ceiling to the living space. This should allow for savings on heating costs (**FIG.17**).

**NOTE:** To operate the reverse button on your fan, press the button while the fan is running.

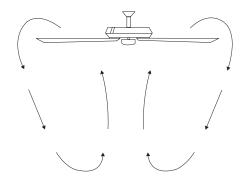


FIG.17

### 14. Wall Control Operating Instructions (cont.)

### Pairing

If you need to re-pair your fan or you want to pair a second wall control:

- Power cycle your fan by turning off the power at the circuit breaker.
- 2. Press and hold and buttons on wall control for 10-15 seconds.
- 3. The LED will blink green then remain solid green.
- 4. The green LED along with audible beeps will indicate that pairing is successful.
- 5. Test wall control for functionality.

### **Unpairing**

**NOTE:** Purging must be completed within 3 minutes of turning the power on to the fan receiver.

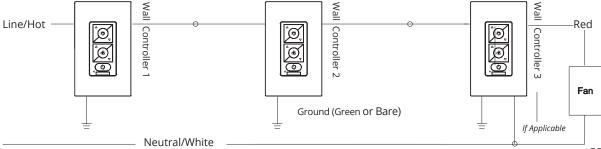
- 1. When you re-engage power to the fans you want to purge, press and hold the  $\triangle \Delta$  and  $\triangle \Delta$  buttons for 4 seconds.
- The LED will alternate red/green, blink green, and the receiver will beep to indicate that purging is successful.

### **Multi Location Wiring**

- 1. Install the wall control using the wiring diagram below.
- Individually pair each of the wall controls with the fan receiver using the pairing instructions in the previous section.

**NOTE:** Pairing must be completed within 3 minutes of turning the power on to the fan/receiver.

### **FIG.18**



20

### 14. Wall Control Operating Instructions (cont.)

### **Factory Reset**

**NOTE:** This will remove wall control and app connections.

Press and hold the 4, and 6 buttons for 10 seconds.

1. The LED will blink red and return to solid red, and the receiver will beep to indicate that the factory reset is successful.

### **Receiver Button Factory Reset**

1. Press the button on the receiver until the wall control beeps (FIG.19).

**NOTE**: This will remove wall control and Modern Forms app connections.

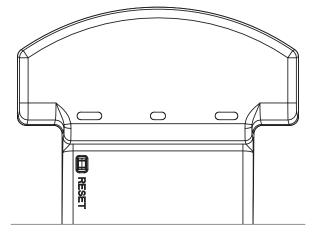


FIG.19

### 15. Application

In addition to the included wall control, you can control your fan through the Modern Forms app.

- To use this app, download it for free from the App Store or Google Play.
- 2. Open the app to create your account. You can also log in using your Facebook or Google account.
- 3. Next, set up a Wi-Fi connection. You'll need the SSID and Wi-Fi password for the network you wish to connect to.
- 4. You'll receive a prompt to name your fan device and upload an optional picture of it if you choose.



App Instructions And Smart Home Device Integration modernforms.com/mfappins

5. The Modern Forms app will walk you through the main screen and show you how to create schedules, change fan speeds, dim the light, switch between Summer and Winter Modes, invite users, create groups and much more. Please refer to the Modern Forms app instructions for more details.

**NOTE:** A maximum of 2 fans can operate on a circuit through the wall control.

**NOTE:** A maximum of 12 fans can operate on a circuit through an on/off switch or a breaker when utilizing the Modern Forms app for the fan control (without the wall control in the circuit).



### 16. Troubleshooting

### Problem Solution

Fan will not start.

1. Check all electrical connections and ensure proper contact.

**WARNING:** Before checking any electrical connections, ensure electricity has been turned off at the circuit breaker before beginning.

- Check wall control LED indicator light. If LED indicator light is not illuminated when pushing a button,
  it is not transmitting a signal. Turn off power from the circuit breaker, then loosen the canopy
  and check all electrical connections according to the wiring diagram in the Making the Electrical
  Connections section.
- 3. Assure that there are no more than 2 fans operating on a circuit through the wall control. Assure that there are no more than 12 fans operating on a circuit through an on/off switch or a breaker if utilizing the Modern Forms app (without the wall control in the circuit).
- 4. Assure that the fan is within range of the Wi-Fi (150 ft) or wall control (30 ft).
- 5. Make sure the fan blades spin freely.
- 6. Make sure the black antenna on the receiver is not tangled with any other electrical wires and is extended around the inside of the canopy.

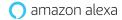
# Fan sounds noisy. 1. Allow a 24-hour "breaking in" period. Most noise associated with a new fan will disappear during this time. 2. Make sure all motor housing screws are securely fastened. 3. Make sure the screws that attach the fan blades to the fan are securely fastened. 4. Make sure the screws securing the LED luminaire module are securely fastened. 5. Make sure that wire nut connections are not rubbing against each other or the interior wall of the canopy

### 17. Accessories

Product	Model	Description	Finish
Wifi Touch Panel Wall Control			
	F-TS	Full app control Wi-Fi range: Up to 150ft from router Sold Separately	BK, WT
Rf Wall Control	F-WC	Included with each fan 6 Fan speeds Dims light to 1% Wall control range: Up to 30ft from fan Works in conjunction with Modern Forms Fan receiver (Not included)	wt
Coupler	XF-I	Connects two downrods	AS, BZ, CFI, DW, GB, GH, GW, LN, MB, MW, OB, SS, TT
Slope Ceiling Kit	XF-SCK	Designed to accommodate buildings with steeper sloped ceilings up to 45° or 12/12 pitch	AS, CFI, LN, SS BZ, DW, GB, GH, GW, MB, MW, OB, TT

Product	Mode	el	Description	Finish		
Downrod	XF-12	12" in downrod		AS, CFI, LN, SS, BZ, DW, GB, GH, GW, MB, MW, OB, TT		
	XF-18	18" in downrod	_	AS, CFI, LN, SS, BZ, DW, GB, GH, GW, MB, MW, OB, TT		
	XF-24	24" in downrod	_	AS, CFI, LN, SS, BZ, DW, GB, GH, GW, MB, MW, OB, TT		
U	XF-36	36" in downrod	All our downrods are ¾"l.D. and are threaded on the motor end to create an extra layer of security to allow for adjustments in the field.	AS, CFI, LN, SS, BZ, DW, GB, GH, GW, MB, MW, OB, TT		
	XF-48	48" in downrod		AS, LN, SS, BZ, DW, GB, GH, GW, MB, MW, OB, TT		
	XF-60	60" in downrod		AS, LN, SS, BZ, DW, GB, GH, GW, MB, MW, OB, TT		
	XF-72	72" in downrod		AS, LN, SS BZ, DW, GB, GH, GW, MB, MW, OB, TT		

# Get Smart









The Modern Forms app synchronizes seamlessly with smart home devices you already own. To learn more go to modernforms.com/mfappins



### Free App Download

Sync with our exclusive Modern Forms App to control fan speed, use smart features like Adaptive Learning, create groups and reduce energy costs.







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For instructions in Spanish please visit the link below. Para obtener instrucciones en español, visite el siguiente enlace.

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# Français

For instructions in French please visit the link below. Pour obtenir des instructions en français, veuillez visiter le lien ci-dessous.

www.modernforms.com/fan-instructions-français



# MODERN FORMS SMART FANS

FR-W1910-52L/FR-W1910-62L