

Job:	
Location:	
Engineer:	
Contractor:	
Contractor PO No.:	
Buyer	
Architect:	
Notes:	

Model (s)	Qty	Notes	
ZTWD11			
ZTWD21			
ZTWD21WF			
TS510W			
TS520W			
	Size	Qty	Notes
R80CT-			
R80CT-			
R80CT-			
Approval			



## FEATURES

Programmable thermostat that controls the equipment and uses modulating dampers to automatically control the distribution of heating and cooling to the upstairs and downstairs zones to keep the upstairs and downstairs temperatures within 2 degrees.

Optional Manual Operation - Homeowner can manually direct more heating or cooling to the upstairs or downstairs zone as desired to improve comfort and save energy.

- Night Comfort Option - Saves 30% in energy at night and improves comfort by automatically directing 30% more heating or cooling to the upstairs sleeping zone and less to the unoccupied downstairs zone as well as using the upstairs temperature sensor to control the heating and cooling calls.
- Programmable, touchscreen thermostat that can be viewed from nearly every angle.
- WiFi and non-WiFi models available.

### ZTWD11 Thermostat

Thermostat with Equipment and 2-Zone Control. Gas/Electric equipment with 1H/1C.

### ZTWD21 Thermostat

Thermostat with Equipment and 2-Zone Control. Gas/Electric equipment with 2H/1C or 1H/2C or Conventional Heat Pump with single stage compressor with single stage auxiliary heating.

### ZTWD21WF Thermostat

WiFi Thermostat with Equipment and 2-Zone Control. Gas/Electric equipment with 2H/1C or 1H/2C or Conventional Heat Pump with single stage compressor with single stage auxiliary heating.

### TS510W Sensor

Wired Temperature Sensor. Installed upstairs. Includes one (1) sensor for single sensor installations.

### TS520W Sensor

Wired Temperature Sensor. Installed upstairs. Includes two (2) sensors for dual sensor installations.

### R80CT-XX Damper

Modulating, Round, 3-Wire Damper. Unsealed. XX diameter from 6 to 20 inches.

## ZTWD Thermostat

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### HVAC Equipment

ZTWD11-Gas/electric equipment with 1H/1C.

ZTWD21 and ZTWD21WF-Gas/electric equipment with 2H/1C or 1H/2C or Conventional Heat Pump with single stage compressor with single stage auxiliary heating.

### Programmable

5/2 format with 4 schedules per day.

### Thermostat Modes

Schedule and Hold

### Thermostat Operation

Heat, Cool, Off.

### LCD Display

8 square inch, high definition LCD with resistive touch.

### Airflow Modes

Automatic Uniform Comfort, Upstairs Comfort Focus or Downstairs Comfort Focus.

### Airflow Adjustment Range

40 to 160% of nominal airflow.

### Airflow Adjustment Increment

2% adjustment to airflow.

### Airflow Adjustment Interval

Automatically adjusts airflow every 2 minutes during heating and cooling calls.

### Connection to Equipment

5-7 conductor 18 or 20 GA thermostat cable.

### WiFi Thermostat

ZTWD21WF

### Power

24VAC, 6VA.

### Installation

Subbase with plug-on thermostat.

### Mechanical

4.60 x 4.20 x 1.00 inches

## TS510W / TS520W Sensor

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### Accuracy

1% at 77° F.

### Range

0 to 170° F.

### Single Sensor Installation

One TS510W sensor is installed upstairs, in the bedroom hallway directly to the wall using hardware provided or in a single gang box.

### Dual Sensor Installation

Two TS520W sensors are installed upstairs, one in the bedroom hallway and one typically in the master bedroom, directly to the wall using hardware provided or in a single gang box. The two temperatures are averaged.

### Connection to Thermostat

2 Conductor 18 or 20 GA thermostat cable.

### Mechanical

4.88 x 3.13 x .25 inches

## R80CT-XX Damper

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### Actuator Type

A80MT. Power modulating. Electronic control of the motor for long life.

### Actuator Mounting

Two screws. Keyed shaft for automatic alignment.

### Connection to Thermostat

3 or 6 Conductor 18 or 20 GA thermostat cable.

### Operation Time

Fully opens in approximately 3 seconds.

### LED Indicators

Green LED indicates fully open and red LED indicates fully closed.

### Electrical Power

24VAC or 24VDC. 2VA when positioning. 1VA when holding.

### Damper Type

Unsealed

### Damper Material

24 GA galvanized steel.

### Blade Material

20 GA galvanized steel.

### Temperature, Operating

-20° to 175° F.

### Maximum Static Pressure

1.0 inch H<sub>2</sub>O.

### Multiple Damper Connection

Up to 4 dampers can be daisy chained to define the upstairs or downstairs space.

### Available Sizes

6" - 20" Diameter.

## Warranty

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5-year warranty, limited to the repair or replacement of the product due to defective material or workmanship.

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