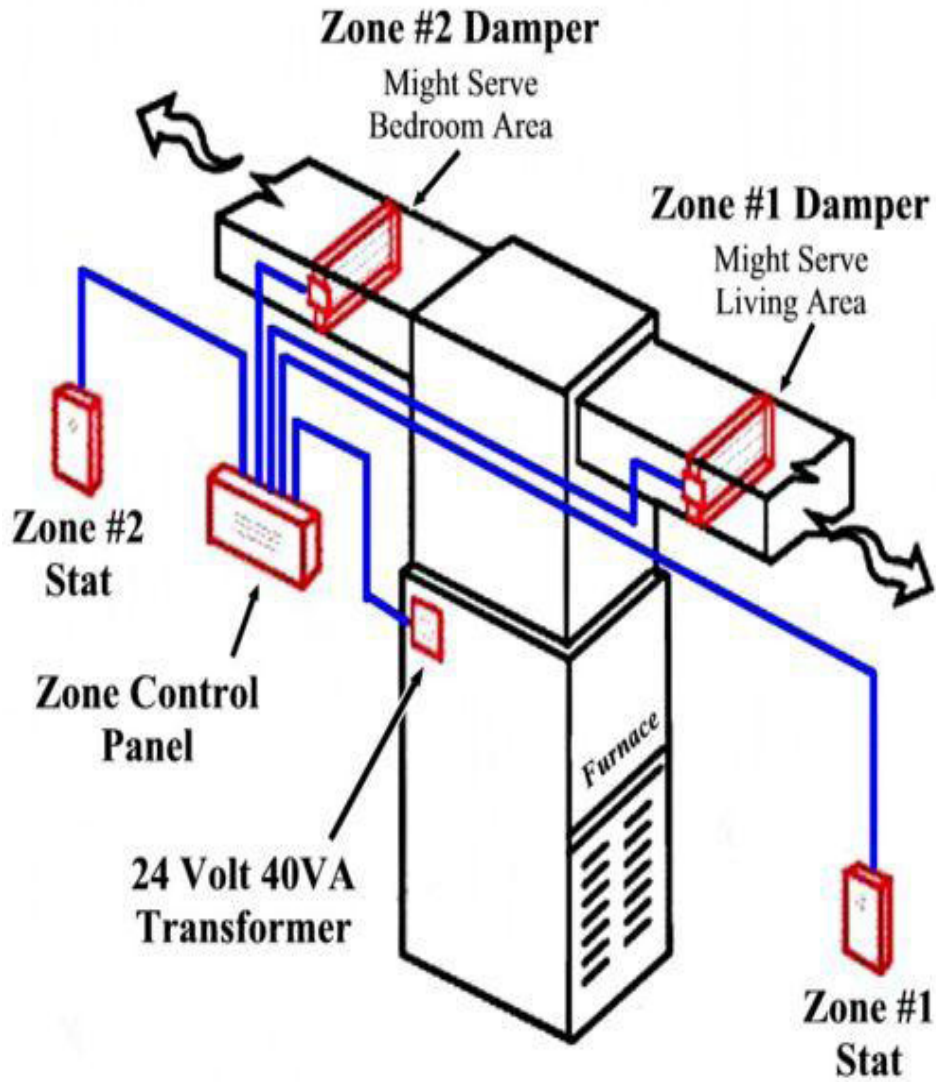


ZONING APPLICATION / SELECTION GUIDE



STEPS TO DESIGNING A ZONED SYSTEM USING HONEYWELL ZONING COMPONENTS

1. First we must understand the style of supply air dampers available.
 - a. **RRM Individual Run Damper**- (12" of exposed pipe required. The closer to the main trunk the better).
 - b. **ZD Main Trunk Damper**- (This requires multiple trunk runs with conditioned air distribution divided into proper zones).

Note: As a rule of thumb: if you are retrofitting a zone system into an existing system you will likely use RRM dampers. If the runs are/or can be connected to individual horizontal trunks then ZD main trunk dampers can/may be used.

2. Determine the number of zones; if more than 4 see Add-A-Zone instructions.

Note 1: When determining the number of zones you should remember that if you require a zone(s) with limited CFM vs total system CFM you will be bypassing (see selecting a bypass damper) a larger portion of your conditioned air. Optimal situation would be to have zones with somewhat close CFM deliveries. Residences are traditionally zoned into 2 zones (living area and sleeping area), some will add a third zone for the basement.

Note 2: Add-A-Zone- Used when you have over 4 zones. You will incur the expense of the TAZ4 Add-A-Zone plus requires transformers. See accessory pricing for incurred costs.

3. Determine if we can get thermostat wire to each zone. You do have wireless thermostat options if running stat wire to the new zones is not an option.
4. Determine the number and style of required supply air dampers required per zone.
5. Calculate the total VA required for the dampers in each zone and system total if using RRM dampers. Each RRM damper (all sizes) draw 2.5VA.

Note 1: The maximum number of RRM retrofit dampers allowed with a 40VA transformer applied is 11.

Note 2: Projects requiring more than 11 RRM dampers must use a 75VA transformer for power and will be allowed up to 25 RRM dampers but no more than 14 per zone.

Note 3: If the total VA in any one zone is more than allowed; you will then be required to use a slave damper relay. (See more below)

6. Determine the total system CFM and the CFM per zone.

7. Determine the size of the required static pressure relief damper (CPRD) by using this formula:

$$\text{SYSTEM CFM minus CFM of the smallest zone} = \text{Bypass CFM required}$$

Note: If the required CFM to bypass is between CPRD sizes it is always better to go up a size.

8. Choose the proper control panel based on number of zones, type of equipment.

Note: It is best to purchase your panel as a kit that includes a 40VA transformer and your discharge air temperature sensor (C7735A1000).

9. Choose your thermostats.

HONEYWELL ZONING SELECTION SHEET

1. Type of dampers RRM _____ ZD _____

2. Number of Zones _____

3. Thermostats wired _____ wireless _____

4. Number of & size of dampers per zone

	Mod	Qty
Zone 1	_____	_____
Zone 2	_____	_____
Zone 3	_____	_____

5. Total VA per zone

	Qty x 2.5VA Each=	Total VA/Zone
Zone 1	_____	_____
Zone 2	_____	_____
Zone 3	_____	_____

6. System total CFM _____

Zone 1 CFM _____

Zone 2 CFM _____

Zone 3 CFM _____

7. Size of By-Pass

System Total CFM minus CFM of Smallest Zone = required CFM to Bypass

Select By-Pass Damper from following chart:

Size	CFM
CPRD8	up to 600
CPRD10	up to 1000
CPRD12	up to 1400
CPRD14	over 1400

Required Bypass Damper required: CPRD _____

8. Select a Panel

HZ311K

1H/1C

3 Zone

Conventional Clg

HZ322K

2H/2C

3 Zone

Conventional Clg

Heat Pump

HZ432K

3H/2C

4 Zone

Conventional Clg

Heat Pump

Dual Fuel

Note 1: C7089U1006 Outdoor air temperature sensor required when using the HZ432 in a dual fuel application.

9. Select Thermostats

Note: If you have multi stage equipment you need not use multi stage stats. Your multi stage panel will stage your equipment for you.

Zoning System WORKSHEET

With this convenient Honeywell zoning worksheet, you can walk through a complete set of zoning system materials to ensure that you have everything you need. Then use the completed worksheet to create the bill of materials for your zoning project, making ordering easier than ever.



ZD Damper | Prestige® Thermostat | TrueZONE® Panel | TrueZONE Bypass

1. TrueZONE® Panel Select one per system.

	Base Part	Qty	Kit*	Qty
TrueZONE® 3H/2C for conventional, heat pump, or dual fuel applications for up to 4 zones	HZ432		HZ432K	
TrueZONE 2H/2C for conventional or 2H/1C heat pump applications for up to 3 zones	HZ322		HZ322K	
TrueZONE 1H/1C single stage applications for up to 3 zones	HZ311		HZ311K	
TrueZONE 2H/1C single stage heat pump applications with auxiliary heat for up to 2 zones	HZ221		HZ221K	
Wireless Adaptor (To enable RedLINK™ thermostats and accessories)	THM4000R1000		-	
Add-a-zone Panel (For use with HZ432 to add 4 additional zones, for up to 32 wired zones total)	TAZ-4		-	

*Kit includes discharge air temperature sensor and 40 VA Transformer

2. Zone Dampers

Select at least one per zone. See reverse for available sizes and part numbers.

Standard Round Dampers	
ARD Part Numbers	Qty

Retrofit Round Dampers	
RRD Part Numbers	Qty

Rectangular Dampers	
ZD Part Numbers	Qty

3. TrueZONE Bypass

Select one per system.

Part Number	Qty
CPRD8	
CPRD10	
CPRD12	
CPRD14	

4. Thermostats and Accessories Thermostats – Select one per zone.

RedLINK-Enabled Thermostats	Part Number	Qty
Prestige® color touchscreen thermostat with RedLINK technology (white/white). Controls up to 4H/2C heat pump or 3H/2C conventional. Thermostat only.**	THX9421R5021WW	
VisionPRO® 8000 with RedLINK Technology. Controls up to 4H/2C heat pump or 3H/2C conventional. Thermostat only.**	TH8320R1003	
RedLINK Wireless FocusPRO® 6000 5-1-1 Day Programmable Thermostat, up to 3H/2C. Thermostat only.	TH6320R1004	

Other Thermostats	Part Number	Qty
Thermostat #1		
Thermostat #2		

RedLINK Accessories	Part Number	Qty
Equipment Interface Module (for use with Prestige or VisionPRO to control IAQ Products or advanced RedLINK features.)**	THM5421R1021	
Wireless Outdoor Air Sensor	C7089R1013	
RedLINK Internet Gateway	THM6000R1002	
Personal Comfort Control	REM5000R1001	

**In order to enable IAQ device control, configurable input sensors, wireless indoor air sensors, and other advanced RedLINK functionality, enroll the thermostat into a supported equipment interface module, and wire the equipment interface module into the TrueZONE panel.

Project Details

JOB NAME _____

DESIGNER _____

MECHANICAL CONTRACTOR _____

CONTRACTOR'S P.O. NO. _____

NOTES _____

TrueZONE Bypass Dampers

Part Number	
CPRD8	Bypass up to 600 CFM (replaces 8" and 10" weighted round barometric damper)
CPRD10	Bypass up to 1000 CFM (replaces 12" weighted round barometric damper)
CPRD12	Bypass up to 1400 CFM (replaces 14" weighted round barometric damper)
CPRD14	Bypass over 1400 CFM (replaces 16" weighted round barometric damper)

Round Dampers

Duct Diameter	Standard Round Damper	Retrofit Round Damper
5" Round Damper	ARD5	RRD5
6" Round Damper	ARD6	RRD6
7" Round Damper	ARD7	RRD7
8" Round Damper	ARD8	RRD8
10" Round Damper	ARD10	-
12" Round Damper	ARD12	-
14" Round Damper	ARD14	-
16" Round Damper	ARD16	-
18" Round Damper	ARD18	-
20" Round Damper	ARD20	-

Rectangular Dampers Motor is on the second dimension.

		Height											
		6	8	10	12	14	16	18	20	22	24	26	28
Depth	6	ZD6X6	ZD6X8	ZD6X10	ZD6X12	ZD6X14	ZD6X16	ZD6X18	ZD6X20	ZD6X22	ZD6X24	ZD6X26	ZD6X28
	8	ZD8X6	ZD8X8	ZD8X10	ZD8X12	ZD8X14	ZD8X16	ZD8X18	ZD8X20	ZD8X22	ZD8X24	ZD8X26	ZD8X28
	10	ZD10X6	ZD10X8	ZD10X10	ZD10X12	ZD10X14	ZD10X16	ZD10X18	ZD10X20	ZD10X22	ZD10X24	ZD10X26	ZD10X28
	12	ZD12X6	ZD12X8	ZD12X10	ZD12X12	ZD12X14	ZD12X16	ZD12X18	ZD12X20	ZD12X22	ZD12X24	ZD12X26	ZD12X28
	14	ZD14X6	ZD14X8	ZD14X10	ZD14X12	ZD14X14	ZD14X16	ZD14X18	ZD14X20	ZD14X22	ZD14X24	ZD14X26	ZD14X28
	16	ZD16X6	ZD16X8	ZD16X10	ZD16X12	ZD16X14	ZD16X16	ZD16X18	ZD16X20	ZD16X22	ZD16X24	ZD16X26	-
	18	ZD18X6	ZD18X8	ZD18X10	ZD18X12	ZD18X14	ZD18X16	ZD18X18	ZD18X20	ZD18X22	ZD18X24	ZD18X26	-
	20	ZD20X6	ZD20X8	ZD20X10	ZD20X12	ZD20X14	ZD20X16	ZD20X18	ZD20X20	ZD20X22	ZD20X24	-	-
	22	ZD22X6	ZD22X8	ZD22X10	ZD22X12	ZD22X14	ZD22X16	ZD22X18	ZD22X20	ZD22X22	ZD22X24	-	-
	24	ZD24X6	ZD24X8	ZD24X10	ZD24X12	ZD24X14	ZD24X16	ZD24X18	ZD24X20	ZD24X22	ZD24X24	-	-
	26	ZD26X6	ZD26X8	ZD26X10	ZD26X12	ZD26X14	ZD26X16	ZD26X18	ZD26X20	-	-	-	-
	28	ZD28X6	ZD28X8	ZD28X10	ZD28X12	ZD28X14	ZD28X16	-	ZD28X20	-	-	-	-

Learn More

For more information about Honeywell Zoning Solutions, see your distributor or visit www.forwardthinking.honeywell.com.

Automation and Control Solutions

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