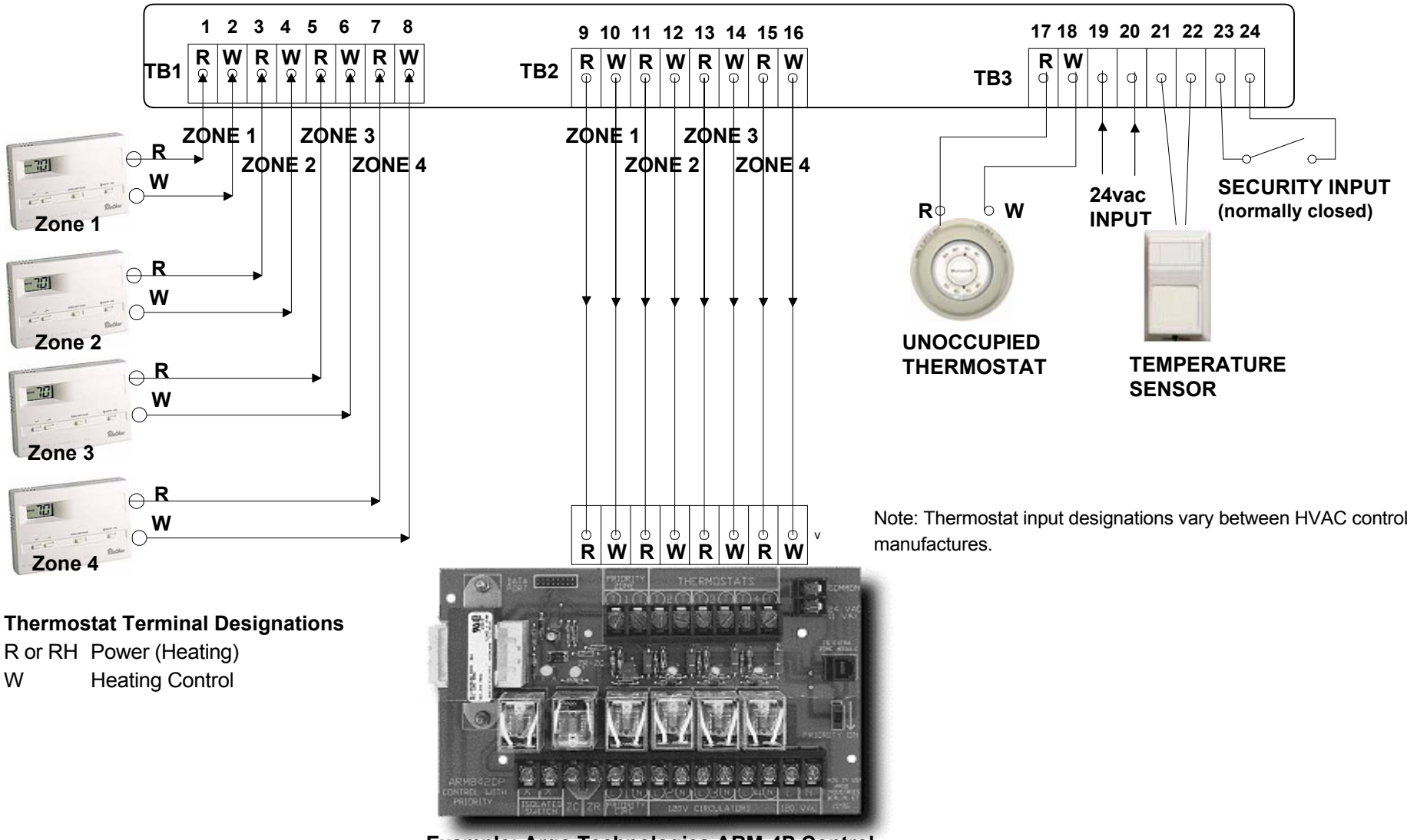
TEMPERATURE GUARD PLUS TERMINAL BLOCKS



Note: Thermostat input designations vary between HVAC control manufactures.

Thermostat Terminal Designations

R or RH Power (Heating)

W Heating Control

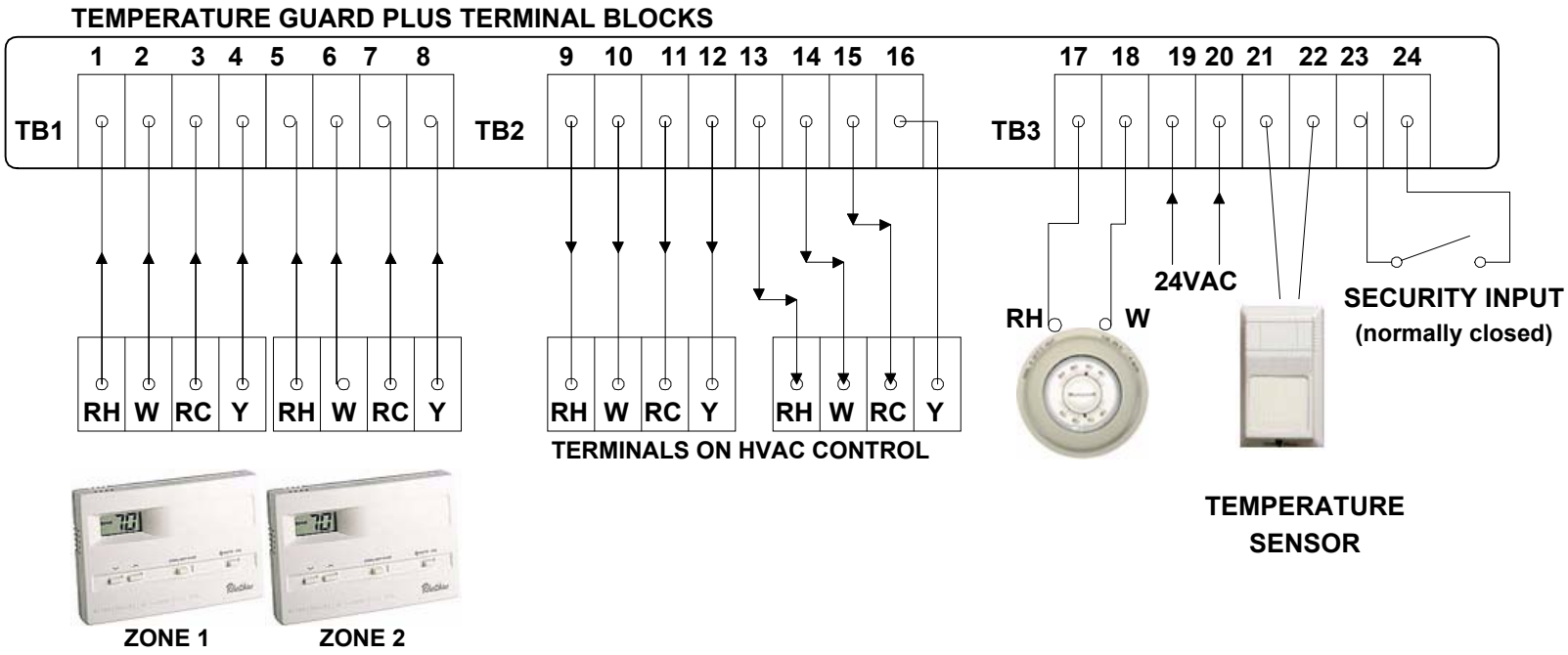
Example: Argo Technologies ARM-4P Control

TB1: Thermostat connections from occupied thermostats

TB2: Thermostat connections to heating control

TB3: Unoccupied thermostat, 24vac inputs, temperature sensor, security input

Temperature Guard Plus Wiring Diagram
Heating Control Only



Thermostat Terminal Designations

RH	Power (Heating)
RC	Power (Cooling)
W	Heating Control
Y	Cooling Control

TB1: Thermostat connections from occupied thermostats

TB2: Thermostat connections to HVAC control(s)

TB3: Unoccupied thermostat, 24vac inputs, temperature sensor, security input

Temperature Guard Plus Wiring Diagram
2 Zones Heating / 2 Zones Cooling

Wiring the Temperature Guard Plus for Two Zones of Heating and Two Zones of Cooling Control

The Temperature Guard Plus (TGP) is designed to be connected in series between the thermostats and the HVAC control and is transparent to the thermostats and the control.

Tip: Locate the TGP near the HVAC control for easy wiring. It is recommened to use a supplied phone and power surge suppressor.

Heating Circuit

1) Locate the heating control's thermostat inputs.
2) Remove zone 1's **R** thermostat wire from the existing heating system control and connect it to terminal 1 on the TGP.
4) Use new wire to connect terminal 9 (**R**) of the TGP to the empty zone 1 **R** terminal on the heating control.
3) Remove zone 1's **W** thermostat wire from the existing heating system control and connect it to terminal 2 on the TGP.
5) Use new wire to connect terminal 10 (**W**) of the TGP to the empty zone 1 **W** terminal on the heating control.
6) Repeat steps 1) to 5) for the each additional zone to be controlled. Follow the terminal designations in the drawing for each additional zone.

Cooling Circuit

1) Remove zone 1's **RC** thermostat wire from the existing A/C control and connect it to terminal 3 on the TGP.
2) Use new wire to connect terminal 11 (**RC**) of the TGP to the empty zone 1 **RC** terminal on the A/C control.
3) Remove zone 1's **Y** thermostat wire from the existing A/C control and connect it to terminal 4 on the TGP.
4) Use new wire to connect terminal 12 (**Y**) of the TGP to the empty zone 1 **Y** terminal on the A/C control.
5) Repeat steps 1) to 4) for the each additional zone to be controlled. Follow the terminal designations in the drawing for each additional zone.

Unoccupied Thermostat

·The unoccupied thermostat controls the temperature of the house when the TGP is in the unoccupied mode. Locate the thermostat in an area most sensitive to freezing or losing heat the fastest. Connect the thermostat's R and W wires to terminals 17 and 18 of the TGP.

TGP Zone Switch Settings

1) Remove the cover from the TGP.
2) Set Zone 1 and Zone 2 switches in the UP position to have the zone heated in the unoccupied mode.
3) Set Zone 2 and Zone 4 switches in the DOWN position to prevent the A/C from turning on when the TGP is in the unoccupied mode and the unoccupied thermostat is calling.
4) Replace the cover on the TGP.

24vac Input

·Connect the wires from the supplied 24vac transformer to terminals 19 and 20 of the TGP. The 24vac is for the unoccupied thermostat only.

Temperature Sensor

·If desired connect the temperature sensor wires to terminals 21 and 22 of the TGP. The wires may be extended using thermostat wire.

Security Input

·If desired mount the supplied magnetic switch to a door or window to monitor for opening when the TGP is in the unoccupied mode. Connect the normally closed contacts of the supplied magnetic switch to terminals 23 and 24 of the TGP.
·If the switch is not used, jump terminals 23 and 24.

Heating Season

1) Verify that the existing thermostats are in the HEAT position and the Fan is in the AUTO position. Leave the temperature setting as desired.
2) Set the unoccupied thermostat low enough to save energy but high enough to prevent freezing.

Cooling Season

1) Verify that the thermostats are in the COOL position. Leave the temperature setting as desired.
2) Set the unoccupied thermostat to OFF or to a value that it will not turn on the heat.

Wiring the Temperature Guard Plus for Remote Heat Control Only

The Temperature Guard Plus (TGP) is designed to be connected in series between the home's existing thermostats and the HVAC control. The TGP is transparent to the thermostats and the control.

Tip: Locate the TGP near the heating control for easy wiring. It is recommened to use a supplied phone and power surge suppressor.

Heating Circuit

1) Locate the heating control's thermostat inputs.
2) Remove zone 1's **R** thermostat wire from the existing heating system control and connect it to terminal 1 on the TGP.
4) Use new wire to connect terminal 9 (**R**) of the TGP to the empty zone 1 **R** terminal on the heating control.
3) Remove zone 1's **W** thermostat wire from the existing heating system control and connect it to terminal 2 on the TGP.
5) Use new wire to connect terminal 10 (**W**) of the TGP to the empty zone 1 **W** terminal on the heating control.
6) Repeat steps 1) to 5) for the each additional zone to be controlled. Follow the terminal designations in the drawing for each additional zone.

Unoccupied Thermostat

·The Unoccupied Thermostat controls the temperature of the house when the TGP is in the Unoccupied Mode. Locate the thermostat in an area most sensitive to freezing or losing heat the fastest. Connect the R and W wires of the thermostat to terminals 17 and 18 of the TGP.

TGP Zone Switch Settings

1) Remove the cover from the TGP.
2) Set each Zone Switch in the UP position to have the zone heated in the unoccupied mode.
3) Set each Zone Switch in the DOWN position to have the zone unheated in the unoccupied mode.

24vac Input

·Connect the wires from the supplied 24vac transformer to terminals 19 and 20 of the TGP. The 24vac is for the Unoccupied Thermostat only.

Temperature Sensor

·If desired connect the Temperature Sensor wires to terminals 21 and 22 of the TGP. The wires may be extended using thermostat wire.

Security Input

·If desired mount the supplied magnetic switch to a door or window to monitor for opening when the TGP is in the Unoccupied Mode. Connect the normally closed contacts of the supplied magnetic switch to terminals 23 and 24 of the TGP.
·If the switch is not used, jump terminals 23 and 24.

Heating Season

1) Verify that the existing thermostats are in the HEAT position and the Fan is in the AUTO position. Leave the temperature setting as desired.
2) Set the Unoccupied Thermostat low enough to save energy but high enough to prevent freezing (ie 50 degrees).

Non Heating Season

·Set the Unoccupied Thermostat to OFF or to a value that it will not turn on the heat.