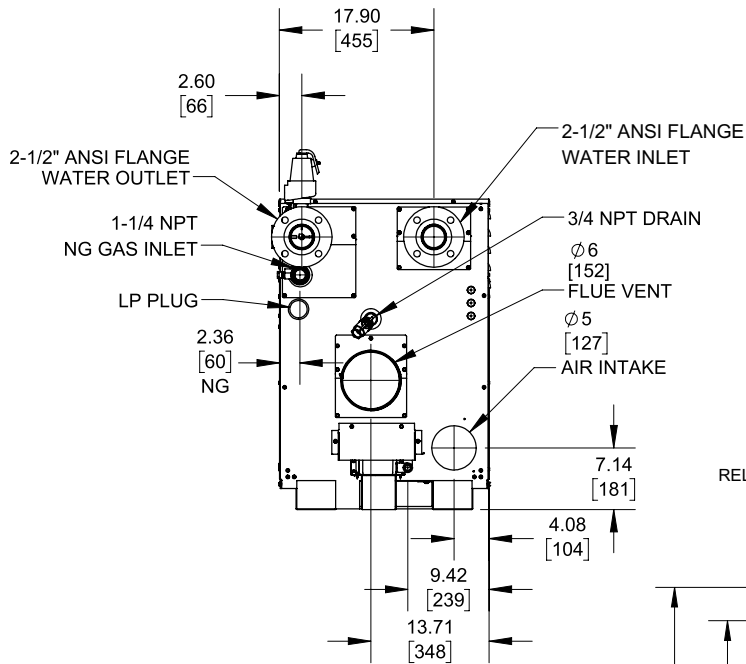


# TORUS 1000

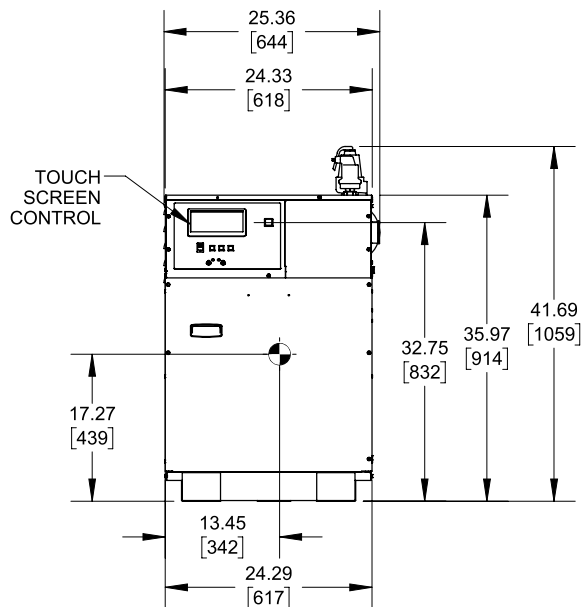
## Category II or Category IV Appliance

(see Installation and Operation Manual for venting information)

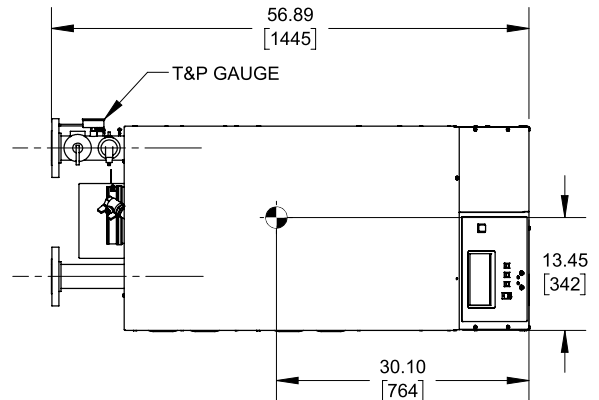
## INDOOR UNIT



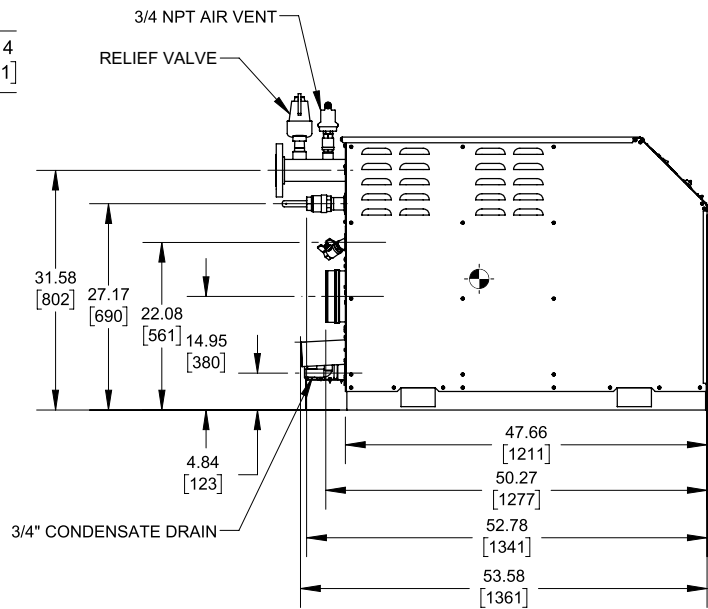
**REAR VIEW**  
RSUB-335\_A



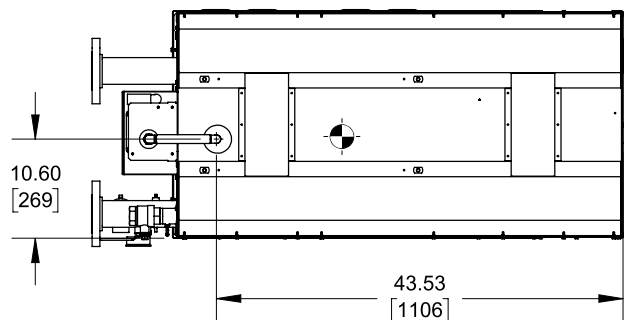
**FRONT VIEW**  
RSUB-335\_A



**TOP VIEW**  
RSUB-335\_A



**LEFT SIDE VIEW**  
RSUB-335\_A



**BOTTOM VIEW**  
RSUB-335\_A

### Notes:

1. Dimensions are approximate and should not be used to "rough-in" equipment.
2. Dimensions are subject to change without notice.
3. All dimensions are in inches (mm).
4. ⦿ Symbol indicates center of gravity.

## BOILER CERTIFIED RATINGS & CAPACITIES

|                                |                      |                                   |                        |
|--------------------------------|----------------------|-----------------------------------|------------------------|
| <b>Fuel Type</b>               | Natural/Propane Gas  | <b>Boiler FLA</b>                 | 12.0*                  |
| <b>Input BTU/hr.</b>           | 999,000 / 292.77 kW  | <b>Boiler HP</b>                  | 28.65                  |
| <b>Output BTU/hr.</b>          | 959,040 / 281.067 kW | <b>Min. Gas Pressure Required</b> | 4"W.C.                 |
| <b>Electrical Requirements</b> | 120 VAC/60 Hz/1PH    | <b>Max. Gas Pressure Allowed</b>  | 14" W.C.               |
|                                |                      | <b>Operating Weight</b>           | 607.28 lbs / 275.46 kg |

## BOILER TRIM & CONTROLS

|                                                                    |           |                            |                        |
|--------------------------------------------------------------------|-----------|----------------------------|------------------------|
| <b>Main Gas Valve</b>                                              | Dungs MBC | <b>Air Switch</b>          | Huba                   |
| <b>Firing Valve</b>                                                | Apollo    | <b>Flow Switch</b>         | SIKA                   |
| <b>Ignition Control</b>                                            | Fenwal    | <b>Blocked Flue Switch</b> | Cleveland NS2          |
| <b>Operating Control</b>                                           | HeatNet®  | <b>Blower Motor</b>        | Ametek                 |
| <b>High Limit</b>                                                  | Jumo      | <b>L.W.C.O.</b>            | 800                    |
| <b>Main Ball Valve</b>                                             | Apollo    | <b>Relief Valve (WB)</b>   | 3/4" x 1" set @ 50 psi |
| Pump contactor strongly recommended for water heater applications. |           | <b>Relief Valve (WW)</b>   | 1" x 1" set @ 125 psi  |

## A.S.M.E.

|                                |                             |                     |                         |
|--------------------------------|-----------------------------|---------------------|-------------------------|
| <b>ASME Sect IV Fire Side</b>  | 75.4 Sq. Ft. / 7.00 Sq. M.  | <b>Design Data</b>  | Max. 160 psig & 210°F   |
| <b>Htg Surface</b>             |                             | <b>Water Volume</b> | 8.1 gal. / 30.66 Liters |
| <b>ASME Sect IV Water Side</b> | 68.24 Sq. Ft. / 6.34 Sq. M. | <b>pH Level</b>     | 6.5-8.5                 |
| <b>Htg Surface</b>             |                             |                     |                         |

\* Add circulator amps.

## BOILER TEMPERATURE RISE / PRESSURE DROP (Based on Full Input)

| 20°F / 11.1°C     |      |                            |      | 30°F / 16.7°C            |     |                               |      | 40°F / 22.2°C |     |               |      |
|-------------------|------|----------------------------|------|--------------------------|-----|-------------------------------|------|---------------|-----|---------------|------|
| Flow Rate         |      | Pressure Drop              |      | Flow Rate                |     | Pressure Drop                 |      | Flow Rate     |     | Pressure Drop |      |
| GPM               | L/s  | Ft                         | kPa  | GPM                      | L/s | Ft                            | kPa  | GPM           | L/s | Ft            | kPa  |
| 95.9              | 6.1  | 16.2                       | 48.3 | 64.0                     | 4.0 | 7.2                           | 21.5 | 48.0          | 3.0 | 4.1           | 12.2 |
| Flow GPM (Boiler) |      | Temp. Rise (°F) (Boiler**) |      | Vent Length (Equiv. Ft.) |     | Air Inlet Length (Equiv. Ft.) |      |               |     |               |      |
| Min               | Max  | Min                        | Max  | Min                      | Max | Min                           | Max  | Min           | Max | Min           | Max  |
| 48.0              | 95.9 | 20                         | 40   | 6                        | 100 | 0                             | 100  |               |     |               |      |

\*\* Min/Max delta t reflects boiler operation at full input. For applications requiring operation above/below these parameters please consult factory.

## WATER HEATER HOURLY RECOVERY CAPACITY (GPH & LPH)

| 40°F | 22°C  | 60°F | 33°C | 80°F | 44°C | 100°F | 56°C | 120°F | 67°C | 140°F | 78°C |
|------|-------|------|------|------|------|-------|------|-------|------|-------|------|
| 2908 | 10993 | 1939 | 7329 | 1454 | 5497 | 1163  | 4397 | 969   | 3664 | 831   | 3141 |

### Water Heater Min Flow Rates

| Normal (4 to 12) gpg |     |               |      | Hard (12 to 15) gpg |     |               |      |
|----------------------|-----|---------------|------|---------------------|-----|---------------|------|
| Flow Rate            |     | Pressure Drop |      | Flow Rate           |     | Pressure Drop |      |
| gpm                  | L/s | Ft            | kPa  | gpm                 | L/s | Ft            | kPa  |
| 73.4                 | 4.6 | 9.5           | 28.3 | 97.9                | 6.2 | 16.8          | 50.3 |

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

## TORUS 1000

**Category II or Category IV Appliance**  
(see Installation and Operation Manual for venting information)



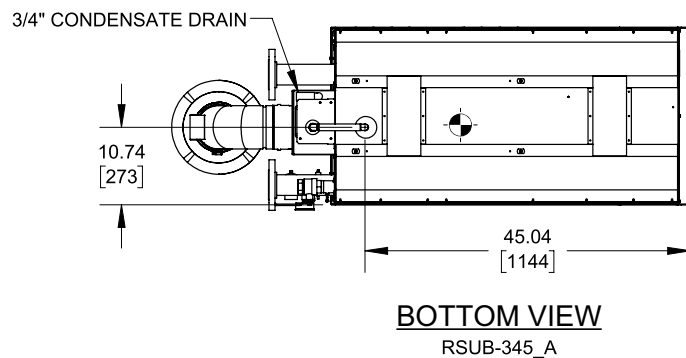
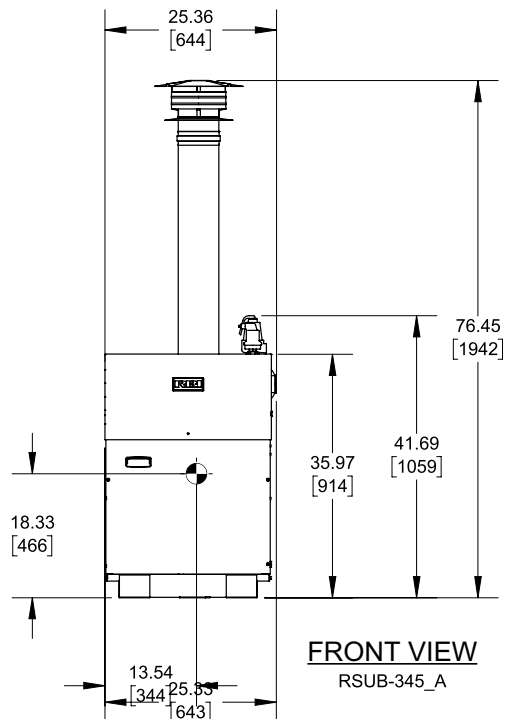
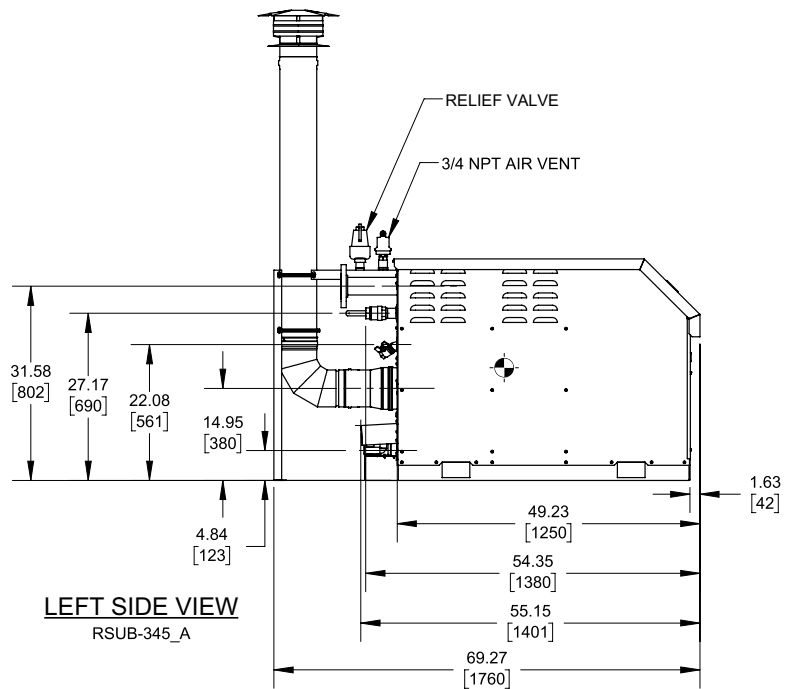
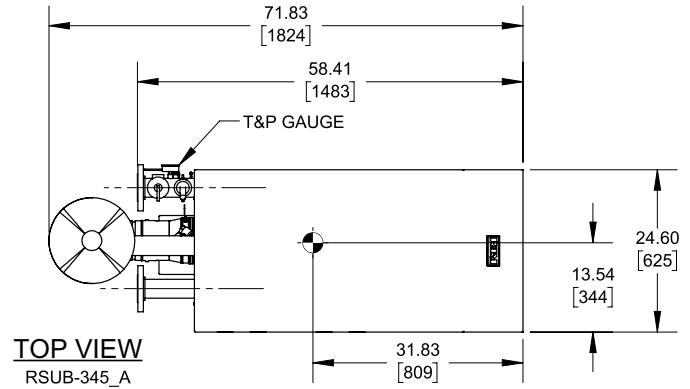
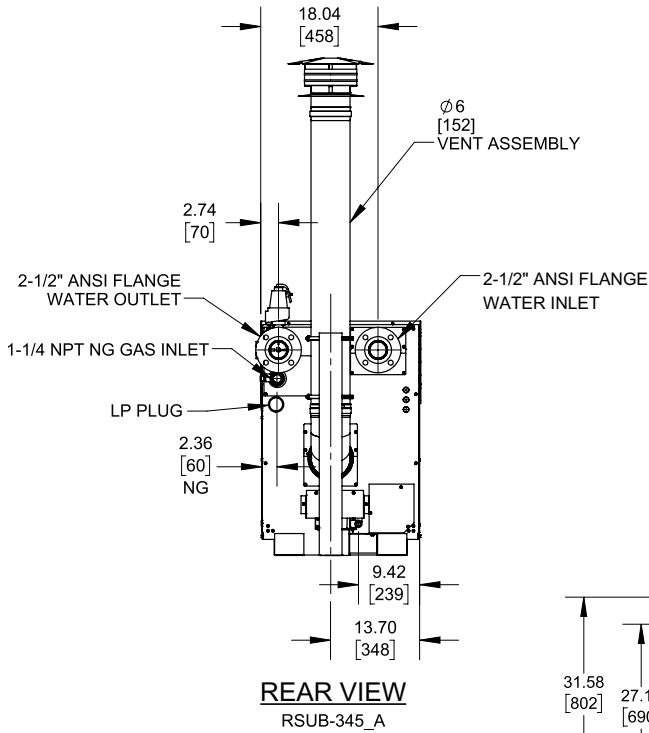
A Division of Mestek, Inc.  
Westfield, MA 01085  
(833) 265-5371

# TORUS 1000

## Category II or Category IV Appliance

(see Installation and Operation Manual for venting information)

## OUTDOOR UNIT



### Notes:

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3. All dimensions are in inches (mm).
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|                                |                      |                                   |                        |
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| <b>Fuel Type</b>               | Natural/Propane Gas  | <b>Boiler FLA</b>                 | 12.0*                  |
| <b>Input BTU/hr.</b>           | 999,000 / 292.77 kW  | <b>Boiler HP</b>                  | 28.65                  |
| <b>Output BTU/hr.</b>          | 959,040 / 281.067 kW | <b>Min. Gas Pressure Required</b> | 4"W.C.                 |
| <b>Electrical Requirements</b> | 120 VAC/60 Hz/1PH    | <b>Max. Gas Pressure Allowed</b>  | 14" W.C.               |
|                                |                      | <b>Operating Weight</b>           | 641.63 lbs / 291.04 kg |

## BOILER TRIM & CONTROLS

|                                                                    |           |                            |                        |
|--------------------------------------------------------------------|-----------|----------------------------|------------------------|
| <b>Main Gas Valve</b>                                              | Dungs MBC | <b>Air Switch</b>          | Huba                   |
| <b>Firing Valve</b>                                                | Apollo    | <b>Flow Switch</b>         | SIKA                   |
| <b>Ignition Control</b>                                            | Fenwal    | <b>Blocked Flue Switch</b> | Cleveland NS2          |
| <b>Operating Control</b>                                           | HeatNet®  | <b>Blower Motor</b>        | Ametek                 |
| <b>High Limit</b>                                                  | Jumo      | <b>L.W.C.O.</b>            | 800                    |
| <b>Main Ball Valve</b>                                             | Apollo    | <b>Relief Valve (WB)</b>   | 3/4" x 1" set @ 50 psi |
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| <b>ASME Sect IV Water Side</b> | 68.24 Sq. Ft. / 6.34 Sq. M. | <b>pH Level</b>     | 6.5-8.5                 |
| <b>Htg Surface</b>             |                             |                     |                         |

\* Add circulator amps.

## BOILER TEMPERATURE RISE / PRESSURE DROP (Based on Full Input)

| 20°F / 11.1°C     |      |                            |      | 30°F / 16.7°C            |     |                               |      | 40°F / 22.2°C |     |               |      |
|-------------------|------|----------------------------|------|--------------------------|-----|-------------------------------|------|---------------|-----|---------------|------|
| Flow Rate         |      | Pressure Drop              |      | Flow Rate                |     | Pressure Drop                 |      | Flow Rate     |     | Pressure Drop |      |
| GPM               | L/s  | Ft                         | kPa  | GPM                      | L/s | Ft                            | kPa  | GPM           | L/s | Ft            | kPa  |
| 95.9              | 6.1  | 16.2                       | 48.3 | 64.0                     | 4.0 | 7.2                           | 21.5 | 48.0          | 3.0 | 4.1           | 12.2 |
| Flow GPM (Boiler) |      | Temp. Rise (°F) (Boiler**) |      | Vent Length (Equiv. Ft.) |     | Air Inlet Length (Equiv. Ft.) |      |               |     |               |      |
| Min               | Max  | Min                        | Max  | Min                      | Max | Min                           | Max  | Min           | Max | Min           | Max  |
| 48.0              | 95.9 | 20                         | 40   | Factory Supplied         |     |                               |      | 0             |     |               |      |

\*\* Min/Max delta t reflects boiler operation at full input. For applications requiring operation above/below these parameters please consult factory.

## WATER HEATER HOURLY RECOVERY CAPACITY (GPH & LPH)

|      |       |      |      |      |      |       |      |       |      |       |      |
|------|-------|------|------|------|------|-------|------|-------|------|-------|------|
| 40°F | 22°C  | 60°F | 33°C | 80°F | 44°C | 100°F | 56°C | 120°F | 67°C | 140°F | 78°C |
| 2908 | 10993 | 1939 | 7329 | 1454 | 5497 | 1163  | 4397 | 969   | 3664 | 831   | 3141 |

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| Flow Rate            |     | Pressure Drop |      | Flow Rate           |     | Pressure Drop |      |
| gpm                  | L/s | Ft            | kPa  | gpm                 | L/s | Ft            | kPa  |
| 73.4                 | 4.6 | 9.5           | 28.3 | 97.9                | 6.2 | 16.8          | 50.3 |

**REP FIRM** \_\_\_\_\_  
**SUBMITTED BY** \_\_\_\_\_  
**JOB NAME** \_\_\_\_\_  
**ARCHITECT** \_\_\_\_\_  
**ENGINEER** \_\_\_\_\_  
**CONTRACTOR** \_\_\_\_\_  
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## TORUS 1000

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