Precast Wet Wells
Wet Wells

Use
Precast wet well structures are typically used to contain liquids, pumps, piping, and other hardware in sanitary sewer or storm drain pumping stations and systems.

Sizes
Precast wet well structures are normally available in diameters of 48 inch through 144 inch.

Application
Precast wet well structures can be used for the following:
- Sanitary pumping stations
- Irrigation pump stations
- Water lines
- Holding tanks
- Storm pump stations

Precast wet well structures can be provided with the following features:
- protective linings
- flexible pipe-to-manhole connections
- custom openings
- custom tops or hatches

Joints
The following joints may be available for precast circular manhole structures:
- pre-formed mastic or butyl gasket
- off-set rubber gasket
- external joint seals

Uses Applicable Specifications
The following specifications apply to precast circular manholes:
- ASTM C478 / AASHTO M199 - Precast Reinforced Concrete Manhole Sections
- ASTM C443 - Joints for Circular Concrete Sewer and Culvert Pipe Using Rubber Gaskets
- ASTM C990 - Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
- ASTM C923 - Resilient Connections Between Reinforced Concrete Manhole Structures and Pipes
**Notes**
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

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**Isometric View**

Hatch Flattop
As Required

Riser
As Required

Extended Base
As Required

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**Title:** 48" Diameter Wet Well
**Isometric View**

**Notes**
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

**Title**: 60" Diameter Wet Well

**Date**: 04-05-17
Notes
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

Isometric View

72" Diameter Wet Well
**Notes**

1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

**Isometric View**

**84" Diameter Wet Well**

<table>
<thead>
<tr>
<th>TITLE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>84&quot; Diameter Wet Well</td>
<td>04-05-17</td>
</tr>
</tbody>
</table>
Notes
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

Isometric View

Hatch Flattop
As Required

Riser
As Required

Extended Base
As Required

96" Diameter Wet Well
Isometric View

Notes
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

108" Diameter Wet Well
Notes
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

Isometric View

120" Diameter Wet Well
**Isometric View**

**Notes**

1. Manhole sections conform to ASTM C478.
2. See joint details for joint sealant options.
3. Steps may be provided, see step detail sheet.
4. Pipe openings provided, as required.
Notes
1) Manhole sections conform to ASTM C478.
2) See joint details for joint sealant options.
3) Steps may be provided, see step detail sheet.
4) Pipe openings provided, as required.

Isometric View

144" Diameter Wet Well
**Manhole sizes available from Ashland, VA facility**

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base Thickness</th>
<th>Extended Base Thickness</th>
<th>Joint Height</th>
<th>Available Joint Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>Y</td>
<td>6&quot; or 8&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>60&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>84&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>5&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>96&quot;</td>
<td>9&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>5&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>120&quot;</td>
<td>10&quot;</td>
<td>8&quot; or 10&quot;</td>
<td>10&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>144&quot;</td>
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<td>12&quot;</td>
<td>10&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>6&quot;</td>
<td>G, M, S/O</td>
</tr>
</tbody>
</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990), S/O=Single Offset (ASTM C443)

**Manhole sizes available from Salem, VA facility**

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base Thickness</th>
<th>Extended Base Thickness</th>
<th>Joint Height</th>
<th>Available Joint Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>60&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>8&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
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<td>84&quot;</td>
<td>8 3/4&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>6&quot;</td>
<td>5&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>96&quot;</td>
<td>9&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
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<td>6&quot;</td>
<td>5&quot;</td>
<td>G, M, S/O</td>
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<td>8&quot;</td>
<td>Y</td>
<td>6&quot;</td>
<td>5 1/4&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>126&quot;</td>
<td>10 1/2&quot;</td>
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<td>8&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>7&quot;</td>
<td>G, M, S/O</td>
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</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990), S/O=Single Offset (ASTM C443)

**Manhole sizes available from Harisonburg, VA facility**

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base Thickness</th>
<th>Extended Base Thickness</th>
<th>Joint Height</th>
<th>Available Joint Types</th>
</tr>
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<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>60&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
</tbody>
</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990), S/O=Single Offset (ASTM C443)

**Manhole sizes available from Martinsburg, WV facility**

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base Thickness</th>
<th>Extended Base Thickness</th>
<th>Joint Height</th>
<th>Available Joint Types</th>
</tr>
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<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>60&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>2 3/4&quot;</td>
<td>G, M, S/O</td>
</tr>
<tr>
<td>84&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>N/A</td>
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<td>5&quot;</td>
<td>G, M, S/O</td>
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<tr>
<td>96&quot;</td>
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<td>8&quot;</td>
<td>8&quot;</td>
<td>N/A</td>
<td>6&quot;</td>
<td>5&quot;</td>
<td>G, M, S/O</td>
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</tbody>
</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990), S/O=Single Offset (ASTM C443)
### Manhole sizes available from Dunn, NC facility

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base</th>
<th>Extended Base</th>
<th>Joint Height</th>
<th>Available Joint Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
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<td>6&quot;</td>
<td>4&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>60&quot;</td>
<td>6&quot;</td>
<td>8&quot; or 12&quot;</td>
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<td>8&quot;</td>
<td>5&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot; or 12&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>6&quot;</td>
<td>5&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>84&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot; or 12&quot;</td>
<td>Y</td>
<td>7&quot;</td>
<td>5&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>96&quot;</td>
<td>8&quot;</td>
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<tr>
<td>120&quot;</td>
<td>10&quot;</td>
<td>12&quot;</td>
<td>8&quot; or 12&quot;</td>
<td>Y</td>
<td>14&quot;</td>
<td>5&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>144&quot;</td>
<td>12&quot;</td>
<td>12&quot;</td>
<td>10&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>6&quot;</td>
<td>G, M</td>
</tr>
</tbody>
</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990)

### Manhole sizes available from Summerville, SC facility

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base</th>
<th>Extended Base</th>
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<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>4&quot; or 7&quot;</td>
<td>3 1/2&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>60&quot;</td>
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<td>8&quot;</td>
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<td>5&quot;</td>
<td>G, M</td>
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<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td>G, M</td>
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<tr>
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<td>8&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>7&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>96&quot;</td>
<td>9&quot;</td>
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<td>12&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>5&quot;</td>
<td>G, M</td>
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<tr>
<td>120&quot;</td>
<td>10&quot;</td>
<td>12&quot;</td>
<td>12&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>6&quot;</td>
<td>G, M</td>
</tr>
</tbody>
</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990)

### Manhole sizes available from Rincon, GA facility

<table>
<thead>
<tr>
<th>Inside Diameter</th>
<th>Wall Thickness</th>
<th>Floor Thickness</th>
<th>Flat-Top Thickness</th>
<th>Regular Base</th>
<th>Extended Base</th>
<th>Joint Height</th>
<th>Available Joint Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>48&quot;</td>
<td>5&quot;</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>2 1/2&quot;</td>
<td>G, M</td>
</tr>
<tr>
<td>60&quot;</td>
<td>6&quot;</td>
<td>8&quot;</td>
<td>6&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>4 1/2&quot;</td>
<td>G, M</td>
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<tr>
<td>72&quot;</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>8&quot;</td>
<td>Y</td>
<td>N/A</td>
<td>5&quot;</td>
<td>G, M</td>
</tr>
</tbody>
</table>

* Joint types: G=Grouted, M=Mastic (ASTM C990)
**Notes**

1) Step design, installation, and material shall meet the requirements of ASTM C478.
2) Plastic material consists of super high impact resistant copolymer polypropylene plastic and conform to specific requirements as detailed in ASTM D4101.
3) Reinforcing steel shall be $\frac{1}{2}$" rebar, Grade 60 and meet the requirements of ASTM A615.
4) Step width and spacing are consistent with the latest requirements of OSHA.
5) Manufacturer's literature available upon request.
Circular Manholes/Vertical Structures

Isometric View

Manhole Inside Diameter

Rubber Gasket Meeting
ASTM C443

Single Offset Joint Detail
Circular Manholes/Vertical Structures

Isometric View

Manhole Inside Diameter

Joint Sealant conforming to ASTM C990 or approved equal
Notes
1) Pipe connection detail used shall be consistent with the specific job requirements as well as the pipe size, type and the structure to be used.
2) Flexible connectors shall meet the requirements of ASTM C923 specifications for Resilient Connectors Between Reinforced Concrete Manhole Structures.
3) Expansion bands, see literature.
4) Manufacturer’s Literature available upon request.
Notes
1) Pipe connection detail used shall be consistent with the specific job requirements as well as the pipe size, type and the structure to be used.
2) Flexible connectors shall meet the requirements of ASTM C923 specifications for Resilient Connectors Between Reinforced Concrete Manhole Structures.
3) Manufacture's Literature available upon request.

Isometric View
Notes
1) Pipe connection detail used shall be consistent with the specific job requirements as well as the pipe size, type and the structure to be used.
2) Rigid connections shall be made on site by the contractor and meet project requirements for mortar joint connections.
Ashland, VA  Charleston, SC
Hanover, VA  Summerville, SC
Harrisonburg, VA  Dunn, NC
Martinsburg, WV  Oakboro, NC
Salem, VA  Rincon, GA
Chesapeake, VA  Greencastle, PA
Jessup, MD  Manassas, VA

Main Phone: 1-800-999-2278 (CAST)

We are committed to making Concrete Pipe & Precast the preferred supplier for our customers by delivering outstanding value, continuous innovation, and exceptional customer experience by consistently fulfilling our promise:

“Not Just Concrete, Concrete Solutions”