PLUMBING COMPLIANCE

Due to the numerous changes in compliance and the regulations/standards (as noted above) and more so due to the critical safety and hazard aspects of pressurised hot water storage vessel, much area of focus has been place on the hot water storage heater and the relevant standards and regulations relating to the installation and more so the compliance to these standards and regulations.

As result of these changes, lack of understanding and in some cases misinterpretation or misguidance, a state of confusion and further lack of understanding has crept into the industry sector.

To help mitigate against this the Institute of Plumbing of South Africa in association with the Plumbing Industry Registration Board has set a Compliance Tables. These Compliance Tables are an industry guideline, and denotes the critical requirements that must be undertaken by the plumber if and when the installations, replacement, replacement and repair of a fixed electrical hot water storage heater is done, so as to meet compliance in terms of the regulations and standards.

TABLE A: COMPLIANCE TABLE FOR THE INSTALLATION OF A NEW FIXED ELECTRIC STORAGE WATER HEATER (GEYSER)

The following table denotes the areas of compliance that must be undertaken by a plumber if and when a new installation is undertaken of a fixed electric storage water heater (geyser):

<table>
<thead>
<tr>
<th>Item</th>
<th>Regulation</th>
<th>Areas of Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SANS 10252-Part 1 and SANS 10254</td>
<td>All NEW fixed electrical storage water heater (geyser) installations must comply with all requirements SANS 10252-1 and SANS 10254.</td>
</tr>
</tbody>
</table>

A "New" installation is defined as:
- where any fixed electrical storage water heater (geyser) that is not being replaced,
- an existing dwelling and or building where an additional fixed electrical storage water heater (geyser) is installed

TABLE B: COMPLIANCE TABLE FOR THE REPLACEMENT OF FIXED ELECTRIC STORAGE WATER HEATER (GEYSER)

The following table denotes the critical areas of compliance that must be undertaken by a plumber if and when a replacement is undertaken of an existing fixed electric storage water heater (geyser):

<table>
<thead>
<tr>
<th>Item</th>
<th>Regulation</th>
<th>Areas of Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SANS 10254</td>
<td>TEMPERATURE AND PRESSURE VALVE</td>
</tr>
<tr>
<td>2</td>
<td>SANS 10254</td>
<td>EXPANSION CONTROL</td>
</tr>
<tr>
<td>3</td>
<td>SANS 10254</td>
<td>ISOLATING VALVES</td>
</tr>
<tr>
<td>4</td>
<td>SANS 10254-10254</td>
<td>VACUUM BREAKERS</td>
</tr>
<tr>
<td>5</td>
<td>SANS 10254-198</td>
<td>PRESSURE CONTROL VALVE</td>
</tr>
<tr>
<td>6</td>
<td>SANS 10254-2025-1</td>
<td>MOUNTING</td>
</tr>
<tr>
<td>7</td>
<td>SANS 10254-2025-1L2</td>
<td>DRIEF TRAY</td>
</tr>
<tr>
<td>8</td>
<td>SANS 10252-1</td>
<td>THERMAL INSULATION</td>
</tr>
</tbody>
</table>

PAPIER WORK
The pipes shall be firmly anchored to prevent water hammer and the dislodgement of joints.

PLUMBING COMPLIANCE SANS 10254:
Installation, replacement and repair of hot water system

*NOTE: These tables do not cover all aspects of compliance as required by regulation & standards. You are still responsible to comply with all regulations and standards. Refer to point 13 & Annexure A: Non-compliance notice SANS 10254 for all areas of compliance.
TABLE C: COMPLIANCE TABLE FOR: THE REPAIRS AND MAINTENANCE OF FIXED ELECTRIC STORAGE WATER HEATERS

<table>
<thead>
<tr>
<th>Item</th>
<th>SANS 10254</th>
<th>SANS 10252-1</th>
<th>SANS 10254 Part 1 and SANS 10254 Part 2</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adequate access must be provided to remove or maintain or replace component.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The discharge pipes from the Temperature and Pressure Valve shall be installed in the correct manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. The temperature and pressure valve shall have the same pressure rating as other valves used in the system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The pressure rating of the Temperature and Pressure Valve may be less than the rated pressure of the storage water heater but shall never exceed it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The location of the Pressure Control Valve must be related to the rated downstream flow-pressure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. See requirements of the Expansion Control Valve if the Pressure Control Valve is removed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Adequate access must be provided to remove or maintain or replace any component.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. A plumbing certificate of compliance from the Plumbing Industry Registration Board (PIRB) the SAQA registered professional body for plumbers, shall be issued for the installation, replacement or repair of any plumbing works carried out on the hot water reticulation system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. When any replacement, repair or maintenance work is being done on any components in the system, a written notice of all non-compliances must be given by the plumber to the owner or occupant for the owner’s attention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLUMBING CERTIFICATE OF COMPLIANCE
A plumbing certificate of compliance from the Plumbing Industry Registration Board (PIRB) the SAQA registered professional body for plumbers, shall be issued for the installation, replacement or repair of any plumbing works carried out on the hot water reticulation system.

WRITTEN NOTICE OF NON COMPLIANCE
When any replacement, repair or maintenance work is being done on any components in the system, a written notice of all non-compliances must be given by the plumber to the owner or occupant for the owner’s attention.

The following critical areas of compliance in terms of the SANS requirements must be undertaken when the repairs/maintenance of a drip tray or installation of a new drip tray to an existing installation.

COMPONENTS (INCL. PIPES, FITTINGS AND FIXTURES)

1. All materials, fittings, components and fixtures used in the repair/maintenance must meet SANS 10252 – 1 section 5 (when applicable the supplier must be able to prove that the component complies to the relevant SANS standard) and must be listed on the JASWIC acceptance list.

2. Materials, pipes, fittings, components and fixtures must be installed as per regulation and manufacturer guidelines.

3. Adequate access must be provided to remove or maintain or replace any component.

MACRO/PIPING

1. Drain pipe must be suitable for hot water as required in SANS 10254 section 5.6.2 (whence the standard reflects all hot water pipes, IDPAE recommends 3m while the remaining pipework should be noted to the client [see below for details]).

2. In the case where the pipe work is totalled replaced and or new pipe is attached by means of brackets or hangers to a load-bearing masonry or concrete wall or to any other vertical structural element.

3. The size of the drip tray shall be such that it will cover the total area of the hot water heater and associated water control appurtenance. A plumbing certificate of compliance from the Plumbing Industry Registration Board (PIRB) the SAQA registered professional body for plumbers, shall be issued for the installation, replacement or repair of any plumbing works carried out on the hot water reticulation system.

WRITTEN NOTICE OF NON COMPLIANCE
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Adequate access must be provided to remove or maintain or replace component.

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