Impact of NAECA Water Heater Rules on Plumbing Contractors

Robert P. Mader, Editorial Director
Penton Mechanical Systems
Impact of NAECA Rules?

• In a nutshell, not much.
• There are, of course, exceptions
In your market, what is the average lifespan of a typical storage tank?
What is the most common size of replacement storage tank water heater that you install in your market?
In your market, what percentage of the time are tank storage water heaters installed in the following locations?

<table>
<thead>
<tr>
<th>Location</th>
<th>0-20%</th>
<th>20-40%</th>
<th>40-60%</th>
<th>60-80%</th>
<th>80-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attic</td>
<td>85.29%</td>
<td>8.82%</td>
<td>2.94%</td>
<td>2.94%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Basement</td>
<td>27.03%</td>
<td>13.51%</td>
<td>2.70%</td>
<td>24.32%</td>
<td>32.43%</td>
</tr>
<tr>
<td>Garage</td>
<td>43.24%</td>
<td>13.51%</td>
<td>16.22%</td>
<td>13.51%</td>
<td>13.51%</td>
</tr>
<tr>
<td>Closet</td>
<td>60.00%</td>
<td>22.86%</td>
<td>8.57%</td>
<td>5.71%</td>
<td>2.86%</td>
</tr>
<tr>
<td>Crawl Space</td>
<td>87.50%</td>
<td>3.13%</td>
<td>3.13%</td>
<td>3.13%</td>
<td>3.13%</td>
</tr>
<tr>
<td>Other</td>
<td>91.67%</td>
<td>8.33%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
Keeping in mind the impact of the new DOE regulations, when the need arises to replace a current storage tank water heater, what is your most likely replacement scenario?
In the event you must modify the existing site location to accommodate a tank to tank replacement which may be wider or taller, what would you anticipate the price to be to the HOMEOWNER for the modification by location?

<table>
<thead>
<tr>
<th>Location</th>
<th>less than $200</th>
<th>$201-$400</th>
<th>$401-$600</th>
<th>$601-$800</th>
<th>$800+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attic</td>
<td>8.00%</td>
<td>28.00%</td>
<td>32.00%</td>
<td>8.00%</td>
<td>24.00%</td>
</tr>
<tr>
<td>Basement</td>
<td>27.27%</td>
<td>39.39%</td>
<td>9.09%</td>
<td>12.12%</td>
<td>12.12%</td>
</tr>
<tr>
<td>Garage</td>
<td>30.30%</td>
<td>39.39%</td>
<td>15.15%</td>
<td>9.09%</td>
<td>6.06%</td>
</tr>
<tr>
<td>Closet</td>
<td>19.35%</td>
<td>32.26%</td>
<td>22.58%</td>
<td>12.90%</td>
<td>12.90%</td>
</tr>
<tr>
<td>Crawl Space</td>
<td>12.50%</td>
<td>20.83%</td>
<td>29.17%</td>
<td>16.67%</td>
<td>20.83%</td>
</tr>
<tr>
<td>Other</td>
<td>58.33%</td>
<td>25.00%</td>
<td>8.33%</td>
<td>8.33%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
Bradford White reports little impact

- Director of Marketing Carl Pinto and Products Marketing Manager Chad Sanborn call it a “non-event.”
- Manufacturers did a good job with education prior to the rules taking effect.
- Manufacturers offered suggested solutions but most contractors found the solutions on their own.
- Low-boys, which may be the most affected category, are less than 10% of shipments.
- Many contractors don’t understand heat pump water heaters.
Kevin Tindall, Tindall & Ranson, Princeton, New Jersey

- NAECA has created problems for Tindall’s multi-family customers.
- He installs 200 water heaters a year, 95% of them gas.
- He has had carpenters come in to rebuild cabinetry.
- His time on site has not increased but his prices went up 20%.
- He has to install larger drain pans to fit the new water heaters.
- Tankless is not an option because of gas piping and venting issues.
Eric Aune, Aune Plumbing, Zimmerman, Minnesota

- NAECA rules have been a non-factor because most water heaters in the upper Midwest are installed in basements.
- Heat pump water heaters have not caught on in the Twin Cities.
- Increased equipment and installation costs have made tankless competitive.
- Tankless costs 1½-2 times the cost of a tank in replacement situations.
- Tankless costs are near parity for new construction.
- Ferguson Enterprises has become a major seller of Navien products in the Twin Cities.
Greg Chick, Ramona’s Plumber, Ramona, California

- Installation problems are the fault of poorly trained plumbers.
- Too many installation crews learn how to install water heaters by installing water heaters.
- There’s a dearth of creative problem-solving.
- Many water heaters in California are installed in garages.
- If space is an issue, the plumber can install a smaller water heater, outfit it with an ASSE 1017 thermostatic mixing valve, and crank up the temperature.
Impact of NAECA Water Heater rules on plumbing contractors

- Not much of an impact.
- Contractors are coming up with good solutions.
- Kevin Tindall believes it’s only a matter of time before he encounters a customer for whom there is no optimum solution.
- Multi-family housing poses the most problems.
- Greg Chick says plumbers need to think more.
- Dwelling units with basements and garages minimize water heater size issues.
- Low-boy water heaters make up less than 10% of the market.
- Equipment costs are higher but all plumbers are on an even playing field.
- Tankless continues to grow but probably not because of NAECA.

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