



## CULLEN MECHANICAL, SPEED REPLACEMENT EXPERTS PROJECT AT-A-GLANCE

<b>Location:</b>	Malden, Massachusetts
<b>Contractor:</b>	Cullen Mechanical
<b>Lead:</b>	Dan Cullen
<b>Product Focus:</b>	LEGIOMIX®
<b>Challenge:</b>	Upgrading high/low mixing valves

**“I CAN GET RID OF EVERYTHING ON THIS WALL  
AND KEEP ONLY THE CIRCULATORS AND A NEW  
LEGIOMIX VALVE.”**

**~DAN CULLEN~**



### Overview:

Cullen Mechanical specializes in commercial and institutional mechanical projects. In the northern Boston suburbs, they are often found updating poorly functioning domestic hot water systems in college campuses, nursing homes, and multi-family housing mechanical systems. For retrofits and new construction alike, their team likes to use the Caleffi LEGIOMIX® electronic mixing valves for consistency and performance.

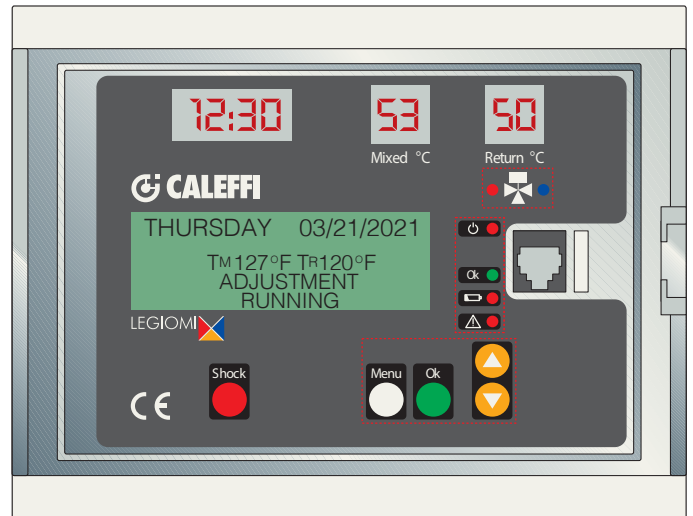
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## THE PROBLEM WITH WATER

In the past, Cullen has run into trouble with mixing valves from other manufacturers not holding up to the demands of large DHW systems. Nobody likes to call the plumber multiple times a year to report that tenants are unhappy with domestic water supply. In nursing home applications, inconsistent hot water delivery is not just annoying to residents, it is an elevated safety concern.

***“Some products they often replace have trouble maintaining temperature calibration. Other valves sometimes break the operating valve stem, leaving the motor with no control and the water supply temperature unchecked.” -Dan Cullen***

They have seen it all, from mechanical issues, scale, and system debris clogging high/low mixing assemblies. In many cases, building owners are accustomed to rebuilding high/low mixing valve assemblies over and over. In existing buildings, rebuilt valves can sometimes clog up with debris a week later. Cullen suggests the LEGIOMIX, because the high Cv



passage allows it to replace many high/low assemblies with a single unit. Additionally, a new LEGIOMIX is often less expensive than rebuild kits for other brands.





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The electronically controlled 3-way ball valve of the LEGIOMIX does not clog with system debris. Instead of tight passages through thermostatic cartridges, the passage through the Legiomix ball valve is wide open. Additionally, it exercises a full open/close full stroke once a day, in the middle of the night, to wipe any scale clean before it has a chance to build up.

## FIXING THE PROBLEM

The Cullen team works fast under pressure. A recent replacement project at a nursing home had a daunting timeframe. They were to shut down the entire DHW system at 7PM and have it back on line as soon as possible, because the residents would be waiting.

**They were able to turn the taps back on for normal operation in the 175 bed complex by 11PM that night.**

To maximize efficiency, they prefabricated as much as they could offsite and chose copper press tailpieces for the LEGIOMIX valve.

Limited mechanical room space is something that can be tricky in retrofit applications. At one of his recent mechanical room bids, Cullen mentioned to the maintenance supervisor, “I can get rid of everything on this wall and keep only the circulators and a new LEGIOMIX valve.” Decluttering convoluted mechanical rooms is a focus for his team any time they are able to

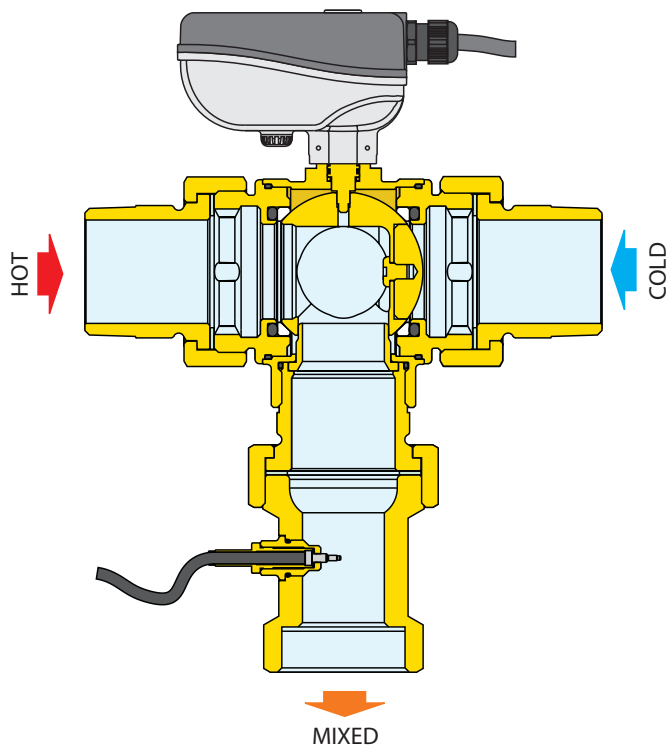
rework existing systems. Customers appreciate simple and stable systems.



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Cullen Mechanical has been serving the Boston market since 1989. The business was started by Dan's father, Daniel Cullen Jr. They know how to dial systems in and keep institutions happy. Six

different boiler manufacturers rely on them for commissioning and startup, because they have built a reputation for consistency. They haven't met a large DHW project they couldn't tackle.



## WANT TO LEARN MORE?

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**SALES:**  
[sales@caleffi.com](mailto:sales@caleffi.com)

**TECHNICAL SUPPORT:**  
[techsupport.us@caleffi.com](mailto:techsupport.us@caleffi.com)

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