

Dealership's Commitment to Drainage

An Ontario-based company partners with contractors to implement safe drains throughout facility.

BY RACHEL RUHL



Last year, the managers of Thorncrest Ford decided to fund the construction of a new service garage to more conveniently serve their rapidly growing business. The new 3,000-square foot customer reception center (CRC) is a double-bay garage that accommodates up to eight vehicles and has all the bells and whistles. Customer and employee safety was a concern, too. In fact, it was high on the list of must-haves.

Mechanics: no strangers to danger

Auto repair areas can be hazardous, so there's no tolerance of liquids on the floor at this shop.

Auto mechanics are responsible for keeping a dizzying variety of vehicles in working order, so safe and orderly shop conditions play a critical role in getting the job done and keeping them safe.

"During the planning process, we had to try to envision all facets of the new facility," says Andre Sauter, parts and service manager at Thorncrest Ford in Toronto, Ontario. "From a customer's very first impression, and aesthetics, all the way to the safety of our own employees, we pushed ourselves to see it. After all, we had

a hard-earned reputation to maintain and we want to protect it from every angle."

Oh, the lowly floor

Inside an auto dealership's service area, concrete floor surfaces should be clean and dry. Yet working on automobiles has a certain way of making things messy.

The need for floor drains was seen as non-negotiable. Round drains were sensible and easy, yet had plenty of drawbacks.

Trench drains got the job done without compromise, fast and completely, leaving floor surfaces more level, and the safest to work on.

"We kept coming back to what's best for the customer and employees," Sauter adds. "We needed to make the experience clean, and efficient, too."

Woodbridge, Ontario-based Clima Mechanical, the contractor chosen to do plumbing and mechanical work at the new facility, was asked to help with streamlining processes, as well.

Humble drain gets attention

"One trend that's really taken off in large-scale shops and garages is trench drains," explains Enzo Di Giuseppe, project foreman at

Clima Mechanical. "Watts Dead Level trench drains are our drains of choice."

The size of a building governs how much slope a trenched floor should have. Once that was calculated, the in-concrete depth for the trenches at the new Thorncrest garage was determined to be three inches.

Di Giuseppe says that he especially appreciated the Dead Level systems' frame-anchored design that ties rebar to the structural frame, not the channels. "This eliminates floating and pinching during the concrete pour, something that can potentially be a very big deal," he adds.

Unlike other trench drain systems, where installers are required to painstakingly cut pieces to fit their installations, Dead Level comes in four-foot sections and have one-foot straight and corner/tee sections for flexibility on uneven runs.

As it is done commonly, the CRC began with a dirt base and a compacted gravel base on top of that. Beginning with the center piece of the trench drain, Di Giuseppe and his crew installed the first 24x24 foot section with steel reinforcement rods that hang from eyelets, making sure that everything for that section, soon



to be poured, was ready for concrete.

"We set the Dead Level pieces level to the 24-inch drain pits. Below that, the plastic is already sloped. It's an engineered product that, with just a bit of experience, is fool-proof," Di Guiseppe says.

"Once we install the 'arms' and attach them, they go level with the pit. It's already pre-sloped with an arrow line showing water-flow

direction, and we simply put it together like a puzzle," he adds.

Di Guiseppe explains that the only detail work is involved in the fine-tuning. Some anchor points require fastening to a wall; and some anchor points are used to pull the drain straight.

"Prior to the pour, we get really picky about creating good anchor points for everything to set right," he



adds.

During the pouring of each section, Di Guiseppe and his crew confirmed the proper height of the concrete, and that the suspended trench drains were level and square.

According to Di Guiseppe, he's learned that it's important to pour the concrete around the trench slowly. And then, to mechanically vibrate around it so that the concrete settles properly.

The final grates — those metal surfaces that support even the weight of a heavy truck, yet permit fluids to flow into the drains easily — can be placed before the concrete is poured, or after. "We like to put them in beforehand because it gives the drain more overall weight, which helps hold everything exactly in place during the pour, and vibration," continues Di Guiseppe.

"We also appreciate the Watts construction covers that fully protect the inside of the drains from debris during construction," adds Di Guiseppe. "The covers protect the drains from liquid concrete that would spill in during the pour. When all of the concrete sets up and dries, the trench drain is being held down and in position permanently, now part of the solid concrete slab."

Di Guiseppe adds, "Now that we've had experience with many different types of commercial drainage, we all agree that Dead Level installs easiest, and with no compromise in performance. They're also light, and amazingly well engineered. Installation is a relatively simple procedure, and once they're in place, they're durable and look great in either a galvanized or black finish."

Floored by the drains

Sauter, other Thorncrest managers, and mechanic teams are ecstatic about the new trench drains.

"We're in the snowbelt of Canada," explains Sauter. "Last winter, even with all the snow and slush that came in on vehicles — the trench drains kept up. Hundreds of gallons — between snow and rain — come into the CRC, and we're confident knowing the drains will keep it safe and dry." ●

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