

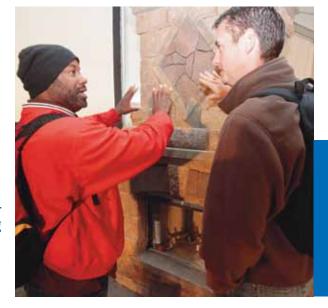
## **IIII CONTRACTOR** focus

By Chuck Green

## **Playing with Fire**

## AVOID THE PITFALLS OF FIRE PIT AND FIREPLACE INSTALLATION

However precisely contractors construct outdoor fire features like fire pits and barbecues using interlocking concrete pavers, experts say that sturdiness and longevity will be compromised unless the top soil and sod are thoroughly excavated. "Ignore [base preparation] and everything done after that is a waste of time," says Ross Yantzi, owner of Pavestone Plus Limited in Tavistock, Ontario.





HNA 2013 attendees
Jamel Taylor (left)
and Wes Maggard
discuss fireplace
installation after the
"Construction of Fire
Features for Outdoor
Living Areas" demo on
Oct. 24.



## **BONUS CONTENT**

The online version of this article at www.interlock design.org will feature a link to photos from the HNA 2013 demo: "Construction of Fire Features for Outdoor Living Areas."

Yet that part of the job often is neglected or short-changed, especially among first-time landscapers. The base work is probably the most difficult, but most important phase of construction, Yantzi says. "That's where people cut corners, by just building on top of soil. They're saving money at the beginning, but keep spending more because [the structure] moves and eventually has to be repaired. We've done quite a few repairs, and whether it's retaining walls or pavers, the reason behind most repairs is inadequate base preparation."

Not one who takes chances, Jason Goodnight, Vice President of The Brick Doctor, Inc., usually adds a concrete footer when constructing fire pits and fireplaces for an even firmer foundation. The thickness of the footer depends on the application, he says. He recommends 4 in. (10 cm) for a standard fire pit under 3 ft. (1 m) tall and 6 in. (15 cm) for larger ones.

Placement of the fire feature is another key consideration. Some regulations require the fireplace or fire pit on a non-combustible surface that extends beyond its sides to a length equal to its height, according to Section 6 of ICPI's Advanced Residential Paver Technician Manual. Several codes, including fire, plumbing and electrical, could apply to the construction of outdoor fireplaces, fire pits, grills and kitchens. Local bylaws, municipal ordinances and homeowner association covenants also may include regulations for outdoor living spaces, while some building departments require permits for the construction of outdoor kitchens and elements like outdoor fireplaces.

Another important requirement for the construction

of fire pits and fireplaces is the use of specialized heatresistant materials because of the extreme temperature differences these structures endure, the manual states. Fire pits sometimes are constructed without regard to heat dissipation. Concrete pavers and segmental retaining wall units aren't made to withstand extreme heat. Fireresistant, ceramic blocks should line the inside of fire pits.

To be more efficient and not burn money, measure and establish an average excavation time for one yard of soil, installation of one ton of base material, and build time for 10 sf  $(1 \text{ m}^2)$  of pavers. "You're developing a database and making jobs more predictable," says Yantzi. Professional landscapers and hardscapers also should be aware of things like access to back properties, where fire pits and barbecues typically are located, he advises. "Access impacts whether [a job] takes three days, five, 20 or 30."

Another way to manage the bottom line is by establishing a realistic time budget for each design and a timeline for completing each project, Goodnight says. Otherwise, expenses can spiral rapidly, especially when customers want expensive features like stainless steel inserts and granite tops, he adds.

According to the 2013 Residential Landscape Architecture Trends Survey, across all categories, 97 percent of respondents rated fire pits and fireplaces as somewhat or very in-demand for 2013, followed by grills at 96.3 percent.

With concrete pavers available in a range of colors, shapes and sizes, these options enhance their popularity over other kinds of paving materials, says Goodnight. •