Camp Bathrooms and Shower-Houses
Designs and Materials that Solve and Prevent Problems!

Camp Business Magazine – Fall 2008
Gary Forster, Y-USA Camping Specialist

I get to see thousands of parent evaluations of summer camps every year, so when I ask you “what’s the single biggest complaint you get?” I already know what it is: your bathrooms. Calling them KYBOs (“Keep Your Bowels Operating”) or other cute names doesn’t give you ANY help with the fact that kids and parents aren’t satisfied, especially with cleanliness. Why? Because if we can’t get something as simple as keeping our bathrooms clean, how in the world could they expect us to do something so much more complicated, like keeping their child safe. Plus it’s just gross.

And they’re right. Don’t even think about building a new showerhouse if your problem is you just won’t spend the money and effort to keep them clean. Mud in your new building will look just as bad or worse. But if you have made the commitment to clean, then there’s no question that a new bathrooms/shower-house could have the single biggest effect on your camper (and parent) satisfaction than any other capital improvement.

First decisions:
Type of Construction
I’ve never seen a camp showerhouse (or dining hall) that didn’t require these two things:

- Plumbing repairs because of leaks (up north, most often because of freezing).
- Expansion or other floor-plan changes (enlarging, adding more fixtures, ADA, privacy, etc).

If the interior walls of the showerhouse were built of concrete block (“CMUs”) it becomes a major headache, if not a roadblock. But if the walls are framed in wood (with double 2x4 pressure treated sill plates) it’s a relative walk-in-the-park. Exterior walls? That has more to do with your environment and seasonality. For low maintenance it’s hard to beat split-face (that’s the rough surface) or burnished (the smoother surface that shows the imbedded pebbles) colored concrete block. But insulating that wall can be inefficient and expensive, so it may be best for summer-only facilities. Which brings you back to wood framing as a good exterior option, too.

Floor construction can be trickier, and that’s because the only good choice for floor covering in wet areas is glazad ceramic tile (as opposed to un-glazed “quarry tile.” More on that later). The issue here is that the only fool-proof surface to put tile on is a concrete slab. Though a contractor may tell you he can put tile over a wood floor, you’ll find the tile manufacturer requires over-sized
floor joists (to prevent the floor from bouncing the slightest bit), extra thick floor sheathing (3/4” t&g plywood), AND concrete backer-board tightly screwed on top. Skip those steps and not only will the tile and grout crack, but the wood underneath will rot.

There are a few rules-of-thumb you should try to include in your plan to prevent recurring future headaches; and all have to do with plumbing. First, don’t put any plumbing on outside walls (like sinks or toilets) as it’s not possible to insulate enough to prevent freezing pipes. Second, try to put all plumbing along a common “plumbing chase,” typically a 32” wide hallway between two bathrooms, with all sinks, toilets, and showers backed up against it. That way all water pipes can be left exposed in the “chase” so that repairs can be made without ever ripping open a wall. Finally, sequence your functions like this from the door: sinks, (urinals), toilets, then showers. No mater what you do the shower area will have a wet floor, and you don’t want people walking through there to get to toilets or sinks. You’ll have mud everywhere.

Floor coverings

Glazed porcelain tile is so popular that you’ll see them used in most commercial construction today: dense, strong, lots of colors and textures; but most importantly the non-slip surface of a non-gloss glaze. No longer are you confined to 1” x 1” tiles for shower rooms. Six-inch or even 12” tiles can work just fine. (The exception would be the floors of old existing shower stalls, were 1” tiles are easier to slope toward a floor drain.)

What color to use? Take a dustpan and broom to one of your existing camp buildings. Sweep up the dirt and take the dustpan to your local home improvement center. Sprinkle the contents over their collection of floor tiles. Whichever hides YOUR color of dirt & mud the best, THAT’S the one you buy.

My personal preference is to get a tile that looks “rustic,” something that fits into the theme of an old camp lodge. They’ll look good with natural wood details (doors & trim) and rugged slate-like texture and colors fit-the-bill for non-slip and dirt-hiding (and by-the-way that breaks my personal best for number of hyphens in one sentence!) Look closely at the tiles to see how thick the glaze is. If the design looks like it’s been “printed on” (lots of dots like a newspaper photo), then it’s not durable enough for floors. You want it to look like it’s made up of tiny grains of sand (glaze, actually) that have been fused together in the furnace to make a color and eggshell coating that can stand up to wear.

“Yes but I’ve got a wood sub-floor.” Then your best choice is to go with “solid vinyl sheet goods” with color that goes all the way through. (Here’s a link to a product I’ve used successfully over wood sub-floors: http://www.armstrong.com/commflooringna/product_details_toolbox_magnify.jsp?item_id=92546). It comes in 6’ widths and almost 1/8” inch thick, is sealed together at the edges when installed, has a slightly non-slip surface, and comes in colors similar to 12”x12” “Excelon” VCT (vinyl composite tiles; what you’re use to seeing in schools, hospitals, and K-mart). The reason you don’t want VCTs in your bathrooms and kitchens is their extremely high maintenance requirements. If you don’t keep them waxed
and buffed they shrink over time, especially if they get wet (like under sinks and toilets. Remember seeing that before?) The cracks between tiles get big and black and then they finally pop right up. The reason they use them in big stores and schools is their low cost and general durability (where they don’t get wet, and where they can be waxed and buffed at least once a week.)

You also don’t want to use the standard 12’ wide vinyl kitchen flooring they sell in homecenters. It’s mostly pressed paper with a very thin layer of vinyl on top and an even thinner clear layer on top. It’s fine for a residence, but will wear out quickly under commercial use.

But it’s too expensive.” Go to Lowes or Home Depot and they’ll teach you or your property manager how to do it. Use thinset mortar (not glue) and a colored grout, and you’ll be shocked at how easy it is. And you’ll LOVE how people praise you for doing it. A fine way to spend a day off. Got a really nasty showerhouse you can’t afford to replace? Power-wash everything, install some 12”x12” homecenter floor tiles for less than a buck each. WOW. The positive comments will shock you.

**Walls**

Before you cover the studs, remember you’re going to be hanging a lot of “stuff” on your bathroom walls: Toilet partitions, grab bars, towel dispensers, towel hooks, mirrors, and more. One technique is to carefully measure where each will go and then mount 2”x 8” jacks between the studs to “catch” the screws. This works well unless you miscalculate or forget something. That’s why it’s become common to sheath the entire inside of bathrooms with ½” plywood. Typically that would then be covered with ½” “greenboard” moisture-resistant drywall for fireproofing; and then the interior surface is affixed to that. Now you can screw anything you want anywhere and have a solid backing for screws or expanding wall anchors.

Now we come to a matter of taste, so you get to choose (after checking with your users, I hope.) Since FRP (fiberglass reinforced panels) came along 25 years ago (those crinkly-surfaced plastic panels, usually white and glossy) gained wide use because they’re nearly impervious to graffiti or water damage. I still like it in places that will take a lot of abuse or have little use by adults. Commonly it’s installed all the way to the ceiling, but then you’ve really got an institutional look. And though it’s indestructible and easy to clean, dark
mildew will still grow on it in humid areas, usually up near the ceiling.

Mario Hurtado, the brilliant property manager of YMCA Camp Jewell in CT taught me this great application: Use the FRP horizontally for the first 48” of the wall, creating a “wainscot.” Then finish and paint the drywall from that level up to and including the ceiling. Here’s the magic: you can buy “mildewcide” at your paint or home store and they will mix it into your paint for no extra charge. It prevents mildew and mold from growing on the painted surface for years. And just as important Mario uses a light yellow semigloss paint. The bathrooms are positively cheery, looking more like a B&B than a locker room!

“You mentioned I could make a choice?” If the FRP still looks too commercial for you, those same 12” floor tiles (in a contrasting color) will look great on the walls, too; and for not much more than the cost of the FRP other than the extra installation time. It’s what you’ll see in most restaurant bathrooms now. But I still recommend not going higher than 5’ high, leaving yourself 3 feet of painted drywall to the ceiling to keep it feeling light. Don’t take my word for it: go find examples of all of these in your local restaurants (and bring your camera!)

**Fixtures**

If you have an architect design your showerhouse, they’ll give you four options for sinks: If you say “inexpensive” they’ll go with a long Formica® countertop with oval sinks dropped into it. (The Formica will delaminate over time from the standing water, and the thick lip of the sinks sticking up above the counter makes it impossible to wipe water into the sinks.) If you say inexpensive but durable, they’ll specify individual china “lavs” hung from the wall. (A pain to clean, looks institutional, no place to set your toiletries). If they think “it’s just a kids camp, that’s kind of like a prison;” they’ll give you one of those round stainless-steel gang sinks that spray 8 kids hands at once. Wow, THAT will save water and look good to parents. (No?) If you say “I want Corian®” they’ll be happy to give it to you. But it will cost thousands. (A great choice if you have thousands.) If you don’t, then cultured marble/stone (the one-piece vanity tops from the homecenter) can be ordered with as many sink bowls as you want (I’ve ordered as many as 6 in a 12 foot unit). They look great and are easy to clean.
of resources. The extra cost of a “high velocity” hand dryer can be made up in just a year or two in savings on paper towels and staff time.

Toilets give people fits, and everyone has an opinion. The fact that low-flow toilets clogged so easily when they first came out gave them a bad rap. They’ve been redesigned since, and most normal toilets work fine (if kids flush them). Want to make the kids really happy? Find the money to get self-flushing toilets. “What about wall-hung toilets so they’re easier to clean around?” Let’s face it, if your bathrooms are dirty it isn’t because the toilets are in the way. In my opinion, a very big expense for very little payoff.

Urinals for boys? “Wouldn’t extra toilets be more versatile?” Sure, if you don’t mind wiping the pee off the toilet seat every time you want to sit down. EVERY time. Urinals are faster, use less water, and keep your bathrooms smelling cleaner. An easy choice for me.

One of the most visible choices you’ll make are the stall partitions, and here as much as anywhere going for the cheapest original cost (painted steel) will give you the most expensive headaches over time. They’ll rust, names will be scratched in them, and with a little abuse they’ll even bend. Stainless steel won’t rust, but once names get scratched into it they’ll never look the same again. For highest initial cost, but the lowest cost over time, get solid plastic “HinyHiders” from Santana Plastics. You’ve seen them in all colors in lots of nice restrooms.

Architects tend to design institutional bathrooms from previous decades, and that goes for showers, too. Most often they’ll specify showers built of concrete block with an epoxy paint finish. Eeww. You’ve seen what that looks like after a few years. So you cover them with ceramic tile? You could, but why go to that expense for something that feels cold on your feet (and your bottom if you back into the wall?!) Contractors would rather put in one-piece fiberglass shower units. Easy to clean, look great, warm to the touch, very long lasting, and fast to install.

Can’t afford HinyHiders? Consider getting just the raw panels and wall hardware and use highly varnished 2x6 hung from the ceiling to hold the front edge of each panel; run curtain rods between them. I’ve even seen some great changing stalls built from knotty-pine and 5 coats of varnish. I felt like I was in Sweden!

YMCA Camp Edwards, WI

Besides the higher expectation of quality, the absolute need for privacy is the biggest change in bathroom design over the past 30 years. We can’t tell kids from the time their 3 years old to never let anyone see them naked, and then expect to change all that when they get to camp. I’ve seen kids and counselors go a whole summer never showering without their bathing suits because there was no place to change except the toilet stalls. Solid plastic stall partitions work great for changing areas in front of showers, too. Just add another 3’ x 3’ space in front of each 3’ x 3’ shower stall; one shower curtain at the shower and one for the changing area. Get some pretty ones with bright patterns.
Electrical

Of course fluorescent lights are the most efficient way to get a lot of light, and you want a lot of light so the bathrooms look clean and stay clean. For shower rooms the usual choice is a moisture-proof fixture for 4’ tubes that has a rubber gasket to prevent corrosion inside. You can be more creative in other restrooms.

Electric outlets get special treatment for two reasons. The first is the risk of electric shock. To reduce that risk building codes require bathroom outlets to be protected by a Ground Fault Interrupter (GFI); the outlets with the little “test” and “reset” buttons you’re use to. (Your electrician can protect every outlet, even the lights, with a GFI circuit breaker at the panel box, but many of your adult guests will think something’s wrong if they don’t see the GFI outlets they expect!)

The second reason has a clever solution. In most bathrooms outlets are put by the sinks so people can use the mirrors for electric raisers (before they were cordless) and hair dryers. So campers wanting to wash their hands or brush their teeth have to wait for the people drying their hair. Here’s the clever part: just put some mirrors on a different wall (typically directly across from the sinks) and only put outlets there! Tell your electrician to count on one hair dryer going for every outlet, that way you won’t blow any breakers; and that’s a lot easier than trying to tell your guests it’s their fault if the lights go out.

The difference between us and animals

Animals just throw their stuff on the ground. People hang their clothes and towels on hooks and set their toiletries on shelves. Which do you want to build your showerhouse for? Check out your current showers and see which they were built for. (I must have accidently stayed at a lot of zoos.)

You’ll love this story. I visited a camp and asked what was the biggest complaint they heard from school group chaperones. “No way to keep the cabins clean,” they say. I ask why don’t you have brooms, dustpans, and simple cleaning supplies in the cabins? “Because when we had brooms and mops and sponges in the cabins, they kept wearing out. So we just stopped replacing them.” I’m not kidding.

If you want your showerhouse to be kept clean, there are at least three prerequisites. We’ve covered the first one already: use materials that are easy to keep clean and don’t easily break or wear out. Next, share your expectations. I once stayed at the Nantahala Outdoor Center campground and saw this inspired little sign over the sink: “This is communal space. Please help keep it clean for all of us. Thanks for your help.” (A little nicer than “Your mother doesn’t live here; clean up after yourself!”)

And of course, those cleaning supplies the teachers had to do without. A closet with a mop basin for filling and emptying a rolling mop and wringer bucket, broom and dustpan, paper products, and a mild cleaner could be open to camp staff and guests to use when needed. Harsh cleaners, toilet brushes, light bulbs, etc. can be in a locked cabinet in the closet.
Want to save some money? Look closely at the design specifications. It likely calls for toilet paper, soap, and towel dispensers. But your paper supplier will give you those things for free, and they’ll fit the products you want.

**Last wipes**

A few diverse thoughts to finish with: At camps, separate bathrooms and showers for staff are a bad idea. Most insurance companies recommend against them because it reduces supervision in the campers’ showerhouse. The prevalence of camper-on-camper abuse is many times higher than staff-on-camper, so the effort is misplaced.

If camp is about making friends, then places to make friends are our most important tools. The camp showerhouse has great potential that we need to fulfill. For instance, kids are always waiting for their friends; to get changed, to finish showering so they can go back to their group together. But at most camps there’s no place to wait – no benches or picnic tables or tetherball or four-square. Add just one of these and it will act like a magnet to bring kids together and open deeper conversations (and result in less sticks and rocks tossed for entertainment!) Don’t forget places to sit inside. Those “zoo” showerhouses I visited? Not only don’t they have any hooks to hang my towel or clothes, or a little shelf for my stuff; there’s no place to sit to put on my socks & shoes? It could be as simple as a $6 resin stack chair in the changing cubicle; or a long bench as a “waiting” area on the wall opposite the showers. Want us to take our shoes off before we go in the bathroom? Then give us a nice bench right outside the door. (If you’re REALLY clever you’ll make two benches facing each other!)

If you’ve got a big camp, should you have one giant shower house or separate smaller ones? One thought is “the fewer buildings the better,” for construction expense or supervision or just because it’s easier. But consider these points: the more you put under one roof, the bigger the building, and the bigger the building the higher the roof and the more out of scale it becomes to campers and a “camping” experience. It’s no longer a kid-scaled cabins creating their own village, it becomes monolithic like… their school. Inside, the longer the hallways, the more chance for horseplay and “gang” mentality. One shower room for all ages also exposes your youngest campers to the conversations of your oldest campers. (Ewww.)

For free-standing showerhouses, I prefer one for each village. I divide them into two mirror-image sides with a connecting door. This gives you a lot of flexibility. If it’s all one sex of similar ages, lock that door open and it makes for easy supervision and the ability for anyone to use any shower or toilet that’s available. If the village houses boys and girls, or one gender of a wide age range, then lock that door shut and you have two separate showerhouses, one for each group.

How many toilets or showers per camper? This is interesting. If you have a bathroom connected to a single cabin of 10 to 14 people (average sized groups), you have the worse case scenario. This group usually does everything together, so the bathroom is either needed by everyone, or used by no-one. Those camps that added a single shower to “winterize” a cabin have the worst problem. Can you imagine 12 people all in
line to use one shower? So two is the absolute minimum; 3 if you want to keep your facilities from getting in the way of your program.

But if you have a central shower facility, either free-standing or “down the hall,” separate cabin groups are less likely to have identical schedules. It’s much more likely for an individual to find a shower or toilet available at any one time, so you need fewer total fixtures. As a result you can come much closer to the 1:10 or 1:15 ratios that often appear in camp accreditation or licensing documents. It turns out there were good financial and social-development reasons to have central shower houses.

Too bad that moms of first-time campers are much more concerned about their child’s safety. How many times has a director hear, “You mean she has to walk through the dark at night to get to a bathroom?” Today’s common answer doesn’t add much reassurance: “Not by herself. She has to wake up her counselor and another camper, and the THREE of them all have to go together.” Mom can imagine her child staying in bed in misery, too embarrassed to wake all those people up. That’s why I strongly recommend bathrooms attached to the cabins for younger campers. At least a sink and a toilet to avoid that night-time scenario.

**Just Poo It**

All those satisfaction surveys I see every year? The ones that say, “The bathrooms are filthy?” If one of those camps asked me for a donation toward new facilities, I don’t think I would. If they can’t fix their biggest complaint without a new building, then maybe the campers aren’t getting all they could out of camp. Their parents aren’t either.

But once “clean” is no longer the issue, I’ll have more confidence that it would be money very well spent.

*Gary Forster is the Camping Specialist for the YMCA of the USA. Previously he’s been a camp executive and camp property manager where his degrees in Architecture and Business helped him work toward solving problems. You can contact him at gary.forster@ymca.net*