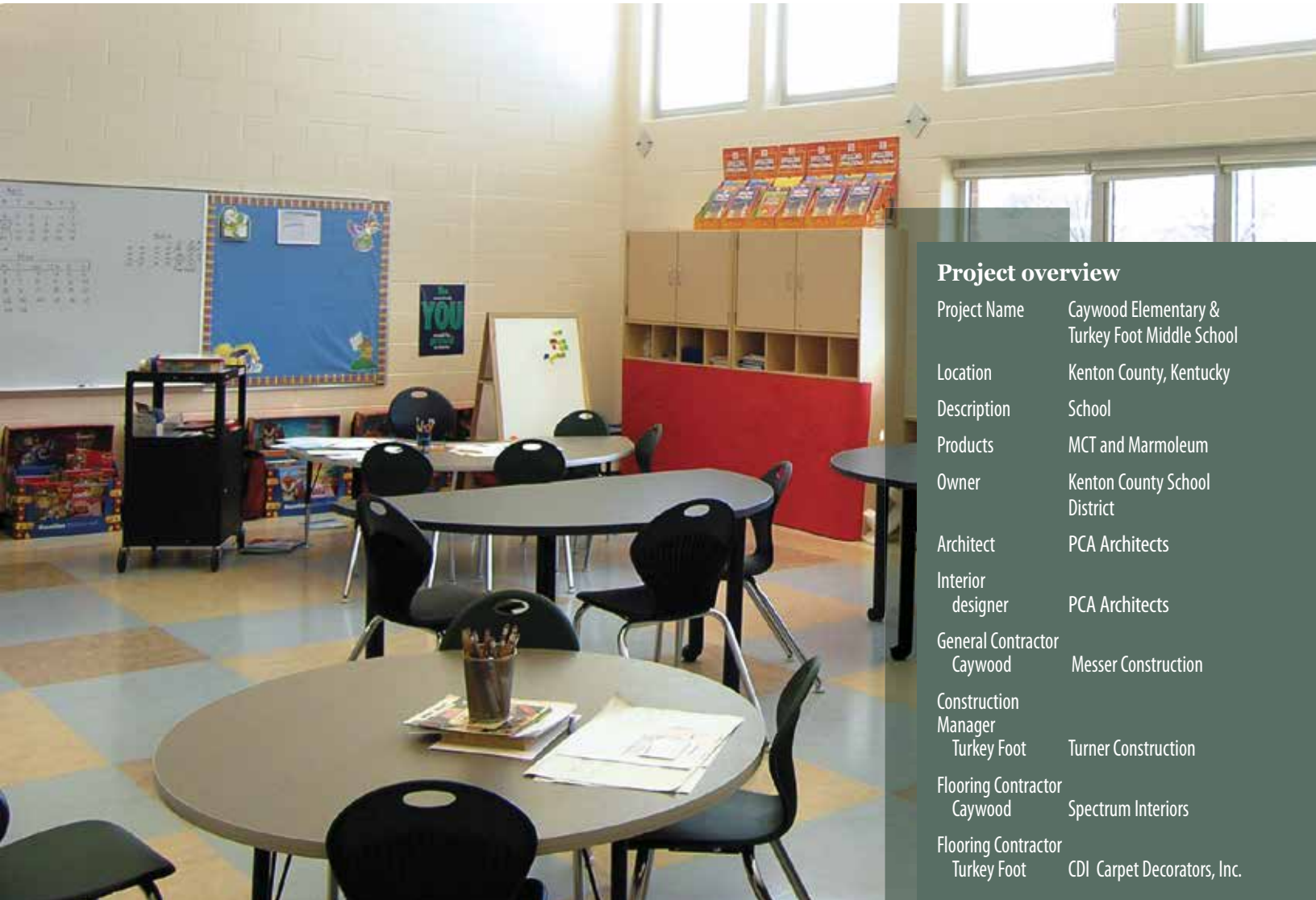


# Best in Class



FLOORING SYSTEMS



## Project overview

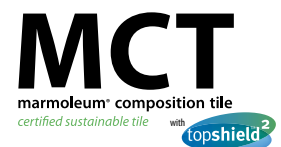
Project Name	Caywood Elementary & Turkey Foot Middle School
Location	Kenton County, Kentucky
Description	School
Products	MCT and Marmoleum
Owner	Kenton County School District
Architect	PCA Architects
Interior designer	PCA Architects
General Contractor Caywood	Messer Construction
Construction Manager Turkey Foot	Turner Construction
Flooring Contractor Caywood	Spectrum Interiors
Flooring Contractor Turkey Foot	CDI Carpet Decorators, Inc.

*A Kentucky school district wins top nationwide honors without losing sight of the bottom line*

The two newest schools in the Kenton County School District are rated among America's very best in terms of environmental sustainability. This accomplishment is topped by an even more impressive distinction: both were built for the same price as an average school building in their home state of Kentucky.

The achievements made at Caywood Elementary and Turkey Foot Middle School required the district to innovate in virtually every aspect of school construction. Both schools are unique from top to bottom, from the solar roof overhead to the environmentally friendly Marmoleum floors underfoot in the hallways. The innovation extends deep beneath the earth, with geothermal wells to supply the schools' heating and cooling.

creating better environments



Bright colored Marmoleum floor coverings enhance the natural light that floods classroom spaces, helping to minimize lighting costs. The floors also lighten the work load of the district's maintenance staff, who once spent countless hours on floor maintenance and now have more time to fine tune the schools' energy systems for maximum savings.



### Floored by the savings

"When I started at Kenton County, we were slaves to the floors," recalled Rob Haney, the district's Executive Director of Support Operations and a key decision maker in the Kenton County building programs. "Our staff was stripping and reapplying seven coats of wax, year in and year out. We were getting practically nothing else done all summer. We even ended up working on the floors during the winter break." Unlike the VCT (vinyl composition tile) floors that typically occupied Kenton County hallways, the new schools' Marmoleum flooring was ready for high traffic use the day after it was installed.

VCT floors were also taxing tight operating budgets with the cost of strippers and floor finishes, which aren't necessary with Marmoleum. "We were bringing in stripping agents and floor finish by the semi-truck load. It was a tremendous cost in material as well as labor," he said, adding that the burden was multiplied by difficulties connected with safe disposal of spent floor care chemicals.

The schools' extensive use of Marmoleum sheet and Marmoleum Composition Tile (MCT) in classrooms and hallways was initially prompted by the designers at PCA Architects, who

routinely recommend MCT over VCT in their education projects. "In education, striving for the healthiest possible environment is a given," noted Andrew Piaskowy, AIA, of PCA, the architecture firm that designed both high performance schools. In addition to Marmoleum's status as a 100% BioBased, completely recyclable material, PCA preferred it for its natural antimicrobial properties. "It's ideal for use in a setting where the spread of colds, flu and other infections need to be kept to a minimum," Piaskowy added.

*"When I started at Kenton County, our staff was stripping and reapplying seven coats of wax, year in and year out.*

*We were slaves to the floor."*

*Rob Haney  
Executive Director of  
Support Operations*

#### The district's challenges:

- Addressing the excessive time and expense of floor care, wanting to free busy maintenance staff for more productive tasks

- Using products that reflect a concern for the community's long term environmental health

- Maximizing environmental performance without exceeding tight construction budgets

#### The Forbo solution:

- MCT and Marmoleum sheet, which require no time-consuming stripping and finishing processes

- 100% BioBased MCT is naturally antimicrobial and free of allergens and plasticizers. It's completely biodegradable, without the toxicity or disposal nightmares of PVC-based products

- From the moment of occupancy, MCT costs less to own. The advantages continue for decades through significantly lower maintenance costs

### New ideas solve old problems

Marmoleum was one of many innovative building solutions that made Caywood and Turkey Foot exceptional in both cost containment and environmental stewardship. Both schools are equipped with geothermal heat pumps, and the roof at Turkey Foot is filled with banks of solar panels that generate electrical energy for cooling, lighting and

*"In education, striving for the healthiest possible environment is a given."*

*Andrew Piaskowy  
AIA, of PCA Architects*

building systems. Walls are equipped with banks of clerestory windows that illuminate without the need for electric lights. The walls at Turkey Foot were crafted of insulated concrete formwork instead of traditional brick, which lowered material costs. Interior walls featured extensive use of ground face block, providing a handsome appearance without the need for painting.

In an interesting twist, Marmoleum was used to create wainscots that protect the walls in stairwells, hallways and gymnasiums, protecting the walls from marks or stains that are difficult to remove from painted walls or brick. "It looks as good today as the day when we opened the school, and it will always look good," Haney said with pride. "It's an application that we'll definitely use again."

### Teacher raises and rich possibilities

The innovations at Kenton County were successful in delivering the outcome that is every school district's bottom line: the satisfaction of the students, teachers and parents who use their schools. Dramatic evidence of success showed in significant enrollment increases, thanks to Kenton County parents who moved their children to both Caywood and Turkey Foot. Parents who want their children to attend Turkey Foot must now add their names to the school's waiting list.

Teachers also have a reason to smile. The Kenton County School District is one of the few school districts in Kentucky that offered their teachers a raise last year. "With all the financial pressures on school districts," Piaskowy noted, "I think that fact speaks volumes for the financial outcomes their sustainability initiatives have been able to achieve."

"I'm an accountant, which means I'm a numbers guy," added Haney. "I'm excited about all the ways this process has paid off for our district, for the parents and the kids as well as for the staff and the community."

Haney said that people throughout the district are excited about expanding the high performance school program. "I can't wait to see what our school district is going to be able to do in the future."



*“I gravitated toward marmoleum because of the tremendous savings we would be getting in terms of future maintenance,” he stated, citing the fact that Marmoleum doesn’t require stripping and the multiple layers of floor finish essential for maintaining VCT floors.*

*Rob Haney, Executive Director of Support Operations*



## Ten top reasons to choose MCT over VCT

MCT (Marmoleum Composition Tile) outperforms VCT (Vinyl Composition Tile) in many important ways. Among the most notable:

- 1. Cost savings** – from the moment of occupancy, MCT costs less to own. The advantages continue for decades through significantly lower maintenance costs.
- 2. Reduced maintenance** – ready for occupancy immediately after installation, and eliminates the stripping and re-application of floor finishes required for VCT. Saves countless hours of staff time and frees you from chemical disposal worries.
- 3. Anti-static** – naturally resistant to static buildup, so dust and dirt won’t linger on floors to aggravate the symptoms of allergy and asthma sufferers.
- 4. Antimicrobial** – naturally resists bacterial growth on surfaces without the need to add harmful pesticides.
- 5. More repairable** – scratches, stains, gouges and cuts are readily removable and repairable by in-house staff.
- 6. Won’t shrink** – excellent size stability over decades of use. Dirt, moisture and bacteria won’t collect, as it does in the seams between shrinking VCT tiles.
- 7. Quieter underfoot** – causes less hallway noise than VCT, minimizing the disruption of foot traffic through public spaces.
- 8. 100% BioBased and recyclable** – created from linseed oil, pine rosin, wood flour and other natural ingredients, which naturally biodegrade into an earth friendly material safe for landfills.
- 9. Indentation resistant** – ten times the indentation resistance of VCT.
- 10. Healthier for occupants** – free of the environmental toxins that leach from VCT flooring and threaten human health.

Another big plus: When you specify, permanently install and maintain a minimum of 10 feet of Coral Sheet\* or Nuway Entrance Systems in the main and secondary entrances of your facility, Forbo will double your manufacturer’s warranty on Marmoleum and MCT products from 5 years to 10 years!

As this and other case studies have proven, MCT and Marmoleum are healthier, more economical and better for the environment. For more information go to [WWW.ForboflooringNA.com](http://WWW.ForboflooringNA.com)

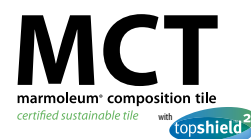
\* Coral loose lay Mats not included



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