

## Frederick Douglass Academy VI, Queens, New York Anchoring into Terra-Cotta Clay Speed Tile

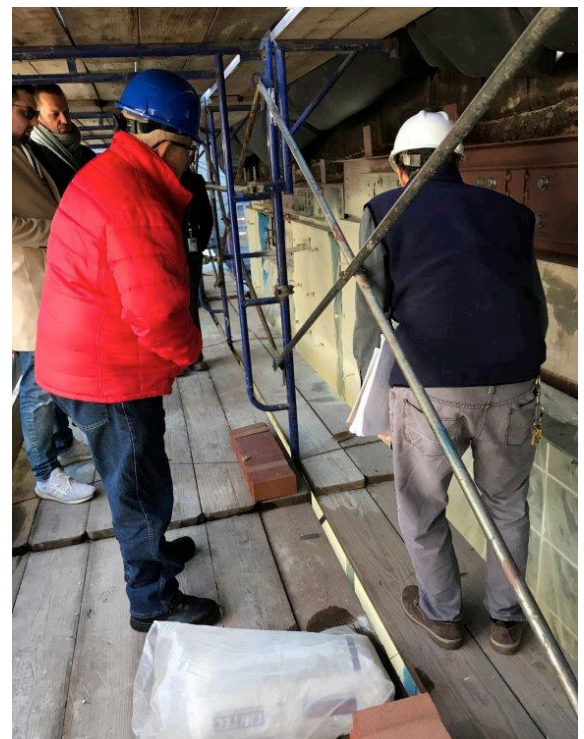


### The Property

Frederick Douglass Academy VI (also known as FDA), is a co-educational public school for grades 6-12 located in Queens, New York City. In 1991, Dr. Lorraine Monroe founded the Frederick Douglass Academy, a public school in Harlem, in the belief that caring instructors, a disciplined but creative environment, and a refusal to accept mediocrity could transform the lives of inner-city kids. Based on the success of Monroe's original model, the New York City school system created seven other "Frederick Douglass Academies" around the city.

### The Problem

When the authority realized that backup for the proposed face brick replacement was Speed Tile there was concern about an effective anchor that was still sympathetic to the fragility of the Speed Tile Units.



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After an exhaustive search and realizing that the Cintec anchor, which is composed of a structural member surrounded by a sock, in this case oversized, with a cementitious grout pumped into it, had already been specified for other similar conditions by the NYC SCA such as Handicapped Railings, again in Speed Tile, they specified Cintec. With the oversized bulb of cement on the back side/ internal part of the Speed Tile, due to the expanded distribution of load with the Cintec Anchor, the risk of failure or the Speed Tile wall was virtually eliminated. Since then, Sen Architects have specified Cintec on other schools where Speed Tile anchoring was required with full confidence. As these are school projects and the Cintec is cement, not resin based, the fact that the Cintec will not fail in a fire is an added bonus. A total of 2520 anchors were used on the project.

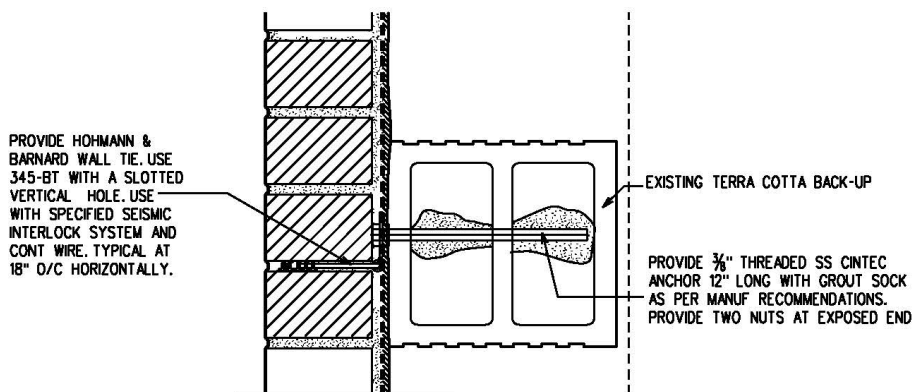


Sen Architects have quoted: "Cintec has helped us in the past three projects. All of them have involved very difficult field conditions where we uncovered poorly installed Terra Cotta masonry back behind a face brick masonry façade. In two of the projects (Far Rockaway and PS45R) the face brick was being removed and replaced. Since the header courses were being cut, the new face brick had to be tied back to the existing back-up, for which the Contract called for H&B DW10 anchors with V Wire ties. Unfortunately these ties needed a unique attachment due to the back-up being hollow Terra Cotta blocks.

Cintec provided the necessary expertise and anchors, whereby the DW10 anchors were attached to the terra cotta blocks as per attached sketch. (below)"

### 1A TYP. FACE BRICK REPLACEMENT

NOT TO SCALE



- NOTES:  
CINTEC:  
1. CINTEC SHALL BE A 3/8" DIA SOLID THREADED ROD.  
2. EXPOSED THREAD SHALL BE A MINIMUM OF 2".  
3. SOCK SIZE SHALL BE 3", FOR FULL LENGTH OF THREADED ROD.  
4. DRILLED HOLE SIZE - 1/2"  
5. TOTAL ANCHOR LENGTH SHALL BE FIELD VERIFIED.  
6. GROUT SHALL BE AS MANUFACTURED BY CINTEC.  
7. PROVIDE TWO NUTS AT EXPOSED END. B. ALL CINTEC INSTALLATION SHALL BE CONDUCTED BY MANUFACTURERS APPROVED INSTALLERS.

- VENEER ANCHORS.  
1. USE HOHMANN & BARNARD 345 -BT FLEXIBLE TIE WITH HORIZONTAL REINFORCING WIRE. MODIFY HOLE TO PROVIDE SLOTTED HOLE FOR VERTICAL ADJUSTMENT AND 3/8" DIA CINTEC ANCHOR.  
2. INSTALL FLEXIBLE TIE IN BETWEEN THE TWO NUTS ON THE CINTEC ANCHOR.

### 11 TYP. FACE BRICK REPLACEMENT AT TERRA COTTA BACK-UP LOCATION.

(FOR INFO NOT SHOWN, PLEASE REFER DETAIL 1A)

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