

February 12, 1990

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Russell Gray, President
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RE: Fitzhugh Street Parking Garage/Color Treatment
City of Rochester, New York, USA
QPK #3-86112

Dear Mr. Gray:

We are writing to summarize our efforts and findings regarding the Nawkaw "Color Treatment" process proposed as a remedy to the "unacceptable" brick color range of the precast panels at the Fitzhugh Street Parking Garage in Rochester, New York.

We have contacted 6 references which include architects, manufacturers and past clients. All references were positive in their recommendation of your company, performance and product results. All references indicated complete satisfaction with this particular treatment process.

Test data supplied by Nawkaw was reviewed and indicate that 4 color-treated brick samples submitted for testing passed the ASTM C 216-86 freeze/thaw requirements, the same requirements for the Interstate brick specified for the Rochester project. Further discussion with independent testing laboratories and the Brick Institute of America (B.I.A.) indicate that there is no industry standard for accelerated test procedures to simulate 20 to 30 years of brick durability. Color permanence and UV testing procedures for brick color treatment materials are virtually non-existent. Further recommendations from the B.I.A., independent testing labs and individuals with 17 plus years of experience with Canada Brick indicate that this product is a common and simple brick staining procedure which has been in the industry for many years.

In discussions with Nawkaw's chemist, Fred Pugsley, and Ron Grieve of Tekron Associates, a construction material specialist, we are led to understand that the pigments consist of iron oxides which are the same oxides pigmenting the flashed brick surface. The current vehicle is a water-based acrylic polymer, as opposed to the original alkyd- or "spirit"-based vehicle. Current formulations include UV inhibitors to minimize color changes.

The test panels treated in Rochester by Peter Woodworth of Nawkaw, were observed by our office. While some additional treatment will be necessary to bring in the "plum" range to match the sample panel, the technique established and applied does blend the light brick into the range required of the sample panel. All references and Canadian users of this product indicate that color blending and appearance is obtained with a high degree of universal satisfaction.

QPK