



Design Standard Masonry

Purpose:

This design standard has the purpose of creating a consistent application of Masonry work throughout the South San Francisco Unified School District thereby achieving a standard of aesthetic quality, maintenance and performance throughout all renovation and new building projects.

Design Standard:

New Masonry Construction

- Masonry products are discouraged for buildings because of graffiti and maintenance issues. If they ever need to be used to match existing conditions, they should be painted. Unpainted surfaces are not allowed without prior authorization by the District. When masonry products are used, smooth precision cut or split-face finish is acceptable for planters and trash enclosures. Proper anti-graffiti and water repellant masonry sealers from Prosoco or approved equal shall be used.

Masonry Rehabilitation

- Extending the useful life of masonry buildings has a positive environmental impact because the energy required to produce materials for new buildings and the landfill space needed to dispose of old building materials is saved.
- Masonry restoration and cleaning involves many considerations. If the only reason is appearance and the structure is not of historic significance, the work requires less attention and economics may play a larger role in selecting cleaning procedures. If historical preservation is a reason, evaluate the long-term effects of the restoration and cleaning to ensure that no harm will be done. Other considerations include the causes for deterioration, the current condition of existing masonry materials and construction, the source and composition of original materials, the extent and nature of earlier restoration work (if any), the availability of suitable materials for replacement and repair, and the limitations imposed by the project location and the District.

Testing

- Testing the effectiveness and safety of the proposed procedures is the next step unless previous experience with similar work offers enough assurance that testing is unnecessary. It is important that tests be conducted to evaluate cleaning materials and methods. Unless the Project is small or the work can proceed on a cost-plus basis, it is generally necessary to have these preliminary tests performed under a separate contract.



South San Francisco Unified School District



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Testing will make it possible to ensure predictable results and establish specification requirements to permit competitive bidding.

- Begin testing as soon as possible to allow time for additional testing and for testing areas to the weather. A waiting time of one year is advantageous because it provides exposure to a full seasonal cycle, but 30 to 90 days may be more practical and should be considered a minimum. Bidders will want to examine the test area. Do not confuse this testing procedure with the mockups that should be required before the work begins.

Drawings

- The drawings should be detailed enough to show types of work, such as crack repair, masonry unit replacement, special spot cleaning, and spot repointing. Quantity allowance with procedures for authorizing repairs are another way of including such work in the Contract without deciding exactly where or under what circumstances the work will be required. Unit prices are often used along with quantity allowances because the extent of work will usually vary from what is anticipated.

Samples

- Test samples should be done for the Contractor to match. Spell out how the cleaning was done on the sample and what products were used. Be mindful that the Contractor may use different products that may damage the masonry surfaces. There may be more than one type or condition of brick. Therefore more than one test sample should be done, representing all the different types and exposures to be cleaned.

Hazardous Materials

- Masonry cleaning, especially methods that use chemicals or abrasives, generate waste products that must be controlled, collected, and disposed of. Minimizing the negative environmental impact of these waste products should be a consideration in choosing a cleaning process.

Substitutes Allowed?

- N/A

Associated Design Standards

- N/A

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