



WHAT ARE SUBSTITUTIONS – NO SUCH THING AS AND EQUAL

1. Acceptable Materials

- a. If one material is "just like" another material except for minor differences in properties, then it should be possible to use the other material anywhere you use the first material.
- b. Acceptable materials listings illustrate material choices that fit the "just like" essential properties required for the project and are designed to illustrate requirements for successful implementation.

2. Basis-of-Design Materials

- a. One material that is identified or researched and that has significant enough unique characteristics that make it difficult to match "just like" properties or that match materials requirements in existing construction.

3. Substitutions

- a. Substitutions should offer solutions that meet the "just like" essential properties recognizing that all named acceptable materials are (in fact) different at some level--> hence --> no such thing as an equal.
- b. Design professional should consider all substitutions as a potential acceptable material unless a strong reason to do otherwise exists ... incorrect information... deceitful information... "me too" statements ... and so on
- c. If it looks like a duck and quacks like a duck, but needs batteries -you probably have the wrong kind of duck, it doesn't fit the "just like" criteria
 - i. Unsolicited Substitutions
 - ii. Solicited Substitutions

WHEN DO SUBSTITUTIONS HAPPEN?

1. When do they happen?

- a. During the Bid Period:
 - i. Consultant can ask for substitutions for Basis-of-Design Materials = Solicited Substitutions
 - ii. Constructor can propose substitutions for Basis-of-Design Materials or Acceptable Materials listings = Unsolicited Substitutions
 - iii. Except when specification explicitly states "No Substitutions Accepted", or similar words are included

b. After Award of Contract:

i. As with proposals during the Bidding Period, the Constructor can propose substitutions throughout the construction phase to account for:

1. Product Availability
2. Potential Cost or Time Savings
3. Introduce different products that may not have been considered during project research
4. Propose solutions to constructability arising from interpretation of work results indicated within Contract Documents

c. Before the Next Project:

- i. Substitutions can be considered for the next project
- ii. Be mindful of presenting opportunities to the Consultant
- iii. Present the “truth” – similar concept as the Sanskrit word Satya:
 1. Relates to the purity of the meaning
 2. Not a false sense of selling a product that “sort of” fits – build trust
- iv. Upcoming concept – List the Essentials!

2. When do they not happen?

- a. Requests that occur as a part of a Request for Interpretation (RFI)
- b. Requests that occur as a part of a shop drawing or product data submission
- c. Never just "show up" -places risk of document interpretation to the installer -the adage "never assume" needs to be kept in mind (maybe the Consultant or Owner actually wanted that particular doodad -no matter how odd it might seem)
 - i. Apparent Substitutions

THE PROPOSAL

1. List the Essentials

- a. What does the Consultant needs to know to make a fair assessment of proposed substitutions?
- b. Does the proposed substitution perform similarly or better than the products or methods originally specified?
- c. Looking for what makes “just like” with detailed indication of limitations and benefits -this is not high pressure sales tactics -this is about building relationships particularly for future consideration without the need for a proposal
- d. Are similar guaranties or warranties offered?
- e. Do aesthetic and performance requirements require a change; does the proposed substitution require a fundamental change to the design?
- f. Has the proposed substitution been coordinated with other components of adjacent work to prevent disconnects or deficiencies with those products?
- g. Does proposed substitution include all costs associated with the actual product and all of the coordination and related costs required for adjustments to adjacent construction or layouts?

ACCEPTANCE

1. Consider all Implications

- a. Consultant it not obligated to accept any proposed substitution, any consideration will be scrutinized with regards to constructability, cost, impact to schedule and adherence to project performance requirements.
- b. Maybe considered when specified Acceptable Materials or Basis-of-Design Materials are no longer available
- c. Delivery date of products specified would unduly delay completion of Contract; assuming that the specified materials were ordered in a timely fashion.
- d. Constructor is the "expert" BY THE TERMS OF THE CONTRACT and has governance over means and methods, so can propose substitutions that work to improve the finished project and enhance performance requirements using their knowledge from previous projects of similar extent or complexity.

2. What does the Consultant need to make an opinion?

- a. Product identification, including manufacturer's name and address.
- b. Manufacturer's literature, including product description, performance and test data, reference standards, and limitations.
- c. Comparison of properties to specified products.
- d. Accurate comparison of "just like" properties meeting project performance requirements
- e. Respective costs of items originally specified and proposed substitutions indicating credit or extra to the Contract Price.
- f. Samples where appearance is relevant to consideration of Proposed Substitution.
- g. Names and addresses of similar projects where the product has been used.
- h. Listing of material criteria that proposed substitutions can contribute to Project LEED Certification.
- i. Detailed description of the proposed method, and drawings illustrating methods of construction.
- j. Data relating to changes in schedule.
- k. Detailed description of modifications required by proposed substitution to adjacent materials and configurations (if any).

GROUNDS

1. Constructor assumes full responsibility and costs when substitution affects any other work.
 - a. Substitutions that "just appear" that have not undergone review or scrutiny will usually be requested to be removed and replaced with specified materials; goes back to whose risk is at stake in the event of a failure
 - b. Substitutions presented as a result of a failure to schedule or order products in a timely fashion will usually be rejected.

RESPONSIBILITY

1. Included with submissions
 - a. Submittals must clearly indicate that the Constructor accepts responsibility for coordination and costs associated with the proposal for substitution
 - b. Costs must be indicated as a change in contract sum; either as an addition to the base bid price or as a deletion.

- c. Certification or verification that proposed substitutions meet or exceed the performance requirements of the project and applicable codes and standards.
- d. This process is not done to pass responsibility to the Constructor, rather it is done to protect the risk of the Constructor and allow the Consultant to accept project risk required to sign off on Building Code requirements accepting that the work has been substantially performed in accordance with the governing statutes Consultant's liability risk lasts a lifetime, most of the Constructors' risks diminish after the 1 year warranty and disappear after 7 year statute of limitations

DENIAL

1. Reasonable Consideration
 - a. Is this proposed substitution a "me too" product?
 - b. Or is it representative of a product that meets the project performance requirements?
 - c. A true comparison of proposed substitutions evaluating their performance against those required for the project is extremely helpful to the Consultant in making their decision
 - d. A list of Acceptable Materials or a Basis-of-Design Material represents hours of research and design coordination.
2. It is more than just evaluation of the product:
 - a. Engineering capability
 - b. Success on similar projects
 - c. Ability to deliver
 - d. Trustworthiness
3. Substitutions will not be considered that are implicit in submitted shop drawings and samples rather than formally presented proposals as described above
4. Substitutions will not be considered that require substantial changes in the Contract Documents

REQUEST FORMS

1. Standardize submissions
 - a. Create standardized Request Forms during bid and during construction
 - b. Maintain and enforce in a similar manner as change request forms or site observations.