

RD1.4 SPECIFYING CONSTRUCTION PRODUCTS

(see [II:4.6.5](#))

A. The methods of specifying construction products are:

1. Descriptive
2. Performance
3. Reference Standards
4. Proprietary
5. a combination of the above methods

B. The University has elected to follow [Section 3400](#) of the Public Contract Code which requires the use of nonrestrictive specifications. Nonrestrictive specifications (commonly referred to as an "open" specification) are written in such a manner as to **not** limit competition, directly or indirectly, to any one specific concern. An "open" specification allows products of any manufacturer to be used if the product meets the specified requirements. In contrast, a "closed" specification restricts a product to a single manufacturer. A "closed" specification is generally prohibited.

Examples and discussion of the specification methods and their nonrestrictive specifying application follow. For further discussion of the specification methods, see Construction Specifications Institute's *Manual of Practice*.

1. **Descriptive Specifications.** A descriptive specification provides a written detail of a products properties **without** the use of trade or brand names.

Ex: Sand: Clean, washed, sharp, durable natural particles, free from soluble salts or organic impurities. Sand for grouting shall be screened to pass a 30 mesh sieve with not more than 5% passing a 100 mesh screen.

The above specification is "open." However, a descriptive specification is "closed" if drafted to limit the product choice to a single brand or only brands of single manufacturer. **For example, copying of a manufacturer's specification effectively verbatim is not recommended.** Such copying of a manufacturer's specification would probably produce a "closed" specification unless the specification is specifically written by manufacturer to be non-restrictive. Descriptive specifications may be made nonrestrictive (open) by making certain the description does not refer to brands or trade names and does not use the descriptive requirements that are applicable only to product(s) of a single manufacturer.

2. **Performance Specifications.** Performance specifications set forth the ends to be achieved, **not** the means of achieving the desired result.

Ex: Exhaust fan performance. Rated for continuous operation at capacity of 500 CFM against a static pressure of 0.5 inches of water column and temperature of 50 deg. C.

The above specification is "open." However, a performance specification is "closed" when the specifier uses the performance standards applicable to products of a single manufacturer and no other manufacturer can meet those standards. Performance specifications may be made nonrestrictive (open) by making certain the performance

requirements do not refer to brands or trade names and do not use performance requirements applicable to a single manufacturer or subcontractor.

When providing a performance specification, it is also important to stipulate the specific means of validation (i.e. specific tests, specific calculations, etc.) to demonstrate that the performance requirements have been met and the specific timing in which such validation shall be performed.

3. **Reference Standards.** Reference standards specify standards developed by standards setting organizations such as ASTM, State of California, Federal, etc. The various manufacturers must meet these standards.

Ex: Portland Cement: Conform to ASTM C150, Type I or Type II, low alkali. Maximum total alkali shall not exceed 0.6 percent.

The above specification is "open." This type of specification is "closed" when some requirement of a reference standard limits competition by referencing a particular manufacturer or subcontractor. Reference Standards may be made nonrestrictive (open) by using nationally recognized standards developed by independent standard setting organizations.

4. **Proprietary Specifications.** Proprietary specifications identify the desired product by brand name or trade name, model or style designation, and important characteristics. Proprietary specifications may also include the name of the manufacturer and/or city, state when necessary to identify the source of a specified product.

This type of specification is "closed" when the specification does not allow use of equivalent products. Proprietary specifications may be made non-restrictive (open) by adding the phrase "or equal" after the trade or brand name, model or style designation, and important characteristics. Additionally, a proprietary specification should include the salient physical, functional, or performance characteristics of the product that any substitute products must meet as shown below:

Ex: Floor tiles shall be "Daltile", style "Travata", color "Fresco Cream TV90," as manufactured by Dal-Tile Corp., of Dallas, TX, or equal. Floor tiles shall have the following characteristics:

Type of tile (ANSI 137.1):	glazed ceramic tile
Min. thickness (ANSI 137.1):	3/8"
Min. dimensions (ANSI 137.1):	17" W x 17" L
Max. water absorption (ASTM C 373):	3%
Min. coeff. of friction, wet (ASTM C1028):	0.60
Min. coeff. of friction, dry (ASTM C1028):	0.65
Min. breaking strength (ASTM C648):	350 lbs
Min. abrasion resistance (PEI):	4
Min. Mohs scale (ANSI 137.1):	8.5

Ex: Wall switches shall be "Decora", model no. ODS10-IDW, color white, as manufactured by Leviton Corp, or equal. Wall switches shall have the following characteristics:

Occupancy sensor technology:	passive infrared
Switch Type:	single-pole
Adjustment:	manual
Min. pattern:	180 degrees
Min. coverage range:	2100 sf
Min. time adjustment:	1 minute
Max. time adjustment:	15 minute
Min. Load Rating:	800W@120V INC 1200VA@120V 2700VA@277V FL
Voltage:	120/277 Volt AC 60Hz
Photo Cell:	Ambient Override ON
Standards And Certifications:	UL and CSA
Min. warranty:	1-year

5. **Combination of specification methods.** A combination of the above specification methods may be used provided that the resulting specification is non-restrictive (open). For example, several specification methods may be combined as follows:

Ex: Residential entry doors shall be solid core, insulated, six panel doors of type Sta-Tru Plus as manufactured by the Stanley Works Inc. of New Britain, CT, or equal. Residential entry doors shall have the following characteristics:

Min. nominal dimensions:	3'-0" W by 6'-8" H
Max. air infiltration (ASTM E283,ANSI/ISDI-101):	0.05 cfm/sf@1.57psf (25 mph)
Water infiltration (ASTM 331,ANSI/ISDI-104):	zero penetration@2.5psf@5GPH/sf
Acoustical Performance (ASTM E413):	STC 24
Max. U-factor (insulation):	0.17 BTU/sf-HR-F or better
Min. fire rating (ASTM E152):	20 minute
Construction:	24-gage galvanized steel sheet 12 in tall lock block
Finish:	factory primed on all surfaces
Min. warranty:	15-year

Refer to the above discussion of descriptive, performance, reference standard and proprietary specifications, as applicable.

- C. Specifications must be non-restrictive (open) specifications except as authorized in section D below.
1. When specifying a product by brand or trade name and model or style designation, a specifier may list only one brand or trade name and model or style designation followed by the phrase "or equal." A specifier is only required to name an additional product if the specifying agency is aware of an equal product manufactured in California.
 2. If a specifier lists **multiple** brand names with corresponding model or style designations followed by the phrase "or equal", the following conditions apply:

- a. The bidders are informed of multiple products (i.e. brand names and models) that they know will be accepted by University.
- b. The additional cost, if any, of using the other than first-named product must be borne by the bidder. Such costs include without limitation the costs of redesign since the design is based on the first-named product.
- c. Since the University's Representative must review and approve submittals for other than the first-named product, time delays may result if Contractor elects to use other than first-named product.

D. Limited exceptions:

Naming brand(s) **NOT** followed by the phrase "or equal" is allowed only under the following limited circumstances:

1. In order to match other products in use at an existing installation, such as, "to match existing" lock cylinders or floor surfaces. Terms such as, "Convenience for maintenance," "the vendor gives us good service", etc. should not appear in specifications. Generally speaking, it is acceptable to match existing where a project consists of a remodel or expansion of an existing structure (e.g. new light fixtures could match existing to retain an "art deco" look throughout an existing building, or the expansion of an existing building). Legal advice should be sought from the Office of General Counsel if the Facility seeks to utilize the "match existing" exception to match products in buildings that are not part of the project (e.g. to establish a campus standard for elevator manufacturers). The specification of a product using this exception must include the following phrase, "...to match existing {_____}".

OR

2. In order to obtain a necessary item that is only available from one source. The sole source product must be approved in writing at least one level above the project manager as determined by a Facility's policy and delegations. If approved, the specification of a sole source product using this exception must include the following sentence following the product designation: "This is a necessary item, that is only available from the listed source, and no other product shall be furnished."

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