This guide specification is intended to be used with the *North American Architectural Woodwork Standards* (*NAAWS*), the quality standard published by the Woodwork Institute and the Architectural Woodwork Manufacturers Association of Canada.

This is a narrow-scope section covering epoxy resin and plastic laminate chemical-resistant countertops.

Where materials or grades need to be selected, possible choices are in brackets and in [**Bold**]. In some cases, we may not have been able to list all available choices. We have tried to provide ample annotation. Notes and comments are in gray shaded text boxes such as this one.

This section incorporates the Woodwork Institute quality assurance programs. Users are asked to choose between the Certified Compliance and Monitored Compliance programs. The Certified Compliance program allows Woodwork Institute Accredited Millwork Companies (AMC) to inspect and certify its own work. (Woodwork Institute inspectors will re-inspect an AMCs work only if requested). It is, however, open to all bidders regardless of Woodwork Institute affiliation. The Monitored Compliance Program requires all work to be inspected at various stages of fabrication and installation by Woodwork Institute inspectors, (no AMC self-certification is allowed) with inspection reports issued to all parties after each inspection. Costs for these programs are borne by the millwork subcontractor. Visit [**www.woodworkinstitute.com**](http://www.woodworkinstitute.com/) for details.

We have not attempted to create specifications for green certification programs such as LEED. While careful material selection may contribute to several LEED credits, we are not able to keep up with the requirements or the proper specification language. Please consult a qualified LEED authority if LEED certification is a goal.

This guide specification covers the materials and methods you would want to specify for laboratory countertops. You may wish to read the “Countertop” section (Section 11) of the *North American Architectural Woodwork Standards* before using this guide specification. Many of the items you would ordinarily specify are governed by your choice of grade.

NAAWS Custom Grade is a good balance of quality and cost. It is the most commonly specified grade and is adequate for most work. Premium Grade represents an exceptional quality of workmanship that is generally reserved for board rooms, reception areas, and other areas where exceptional quality is desired.

# GENERAL

## SUMMARY

### Section includes:

Delete either 1 or 2 if your project does not require both types of countertops.

#### Chemical-resistant plastic laminate countertops.

#### Epoxy resin countertops

#### Sinks for epoxy resin tops:

##### Epoxy resin sinks and/or cup sinks

##### Polypropylene sinks and/or cup sinks

##### Strainers and tailpieces

#### Metal support brackets for wall-mounted countertops

### Excluding:

#### Metal support brackets and fittings that are part of the building structure

#### Plumbing, electrical fixtures, and telephone equipment

### Related sections:

#### Rough carpentry: Wood blocking or grounds inside finished walls or above finished ceilings

#### Plumbing: Fixtures and fittings installed in countertops

## REFERENCES

### *North American* *Architectural Woodwork Standards*, latest edition. Published jointly by Woodwork Institute and the Architectural Woodwork Manufacturers Association of Canada.

### ISO 4586-3, High Pressure Decorative Laminate, latest edition.

### ANSI 208.1, Particle Board, latest edition.

### ANSI 208.2, MDF, latest edition.

### SEFA 3, Work Surfaces, latest edition.

## SUBMITTALS

### Shop drawings:

This is a requirement if you specify Certified Compliance or Monitored Compliance.

#### Submit shop drawings in conformance with the requirements of the *North American* *Architectural Woodwork Standards*.

#### **[Furnish a Woodwork Institute Certified Compliance Shop Drawing Label on the first page of the shop drawings].**

#### Submit two copies, one of which will be returned with reviewed notations. Make corrections noted (if any) and distribute required copies prior to the start of work.

### Samples:

Include one or both, as appropriate. If mockups are required, samples could be dispensed with.

#### Epoxy resin: Submit four 12-inch square samples. Samples shall be of the color and thickness specified.

#### Plastic laminate: Submit four of the largest sized samples available from the manufacturer. Samples shall include laminate, core material and backer, assembled with type 1 adhesive.

### **[Mockups:**

Ask for mockups if you want to see edge and backsplash details. Keep in mind that this is not an opportunity to change your design, but only to examine the quality of materials and workmanship.

#### **Provide mockups of one countertop of each type to be provided. Mockup shall be of the material and finish to be provided. Approved mockups may be incorporated in the project.]**

## QUALITY ASSURANCE

Select either Certified Compliance or Monitored Compliance below. DO NOT include both.

### Work shall be in accordance with the grade or grades specified of the *North American* *Architectural Woodwork Standards*.

### **[Certified Compliance Program (CCP):**

The Certified Compliance Program provides an additional level of assurance that the work will comply with the requirements of *NAAWS* and the specifications. It is open to all bidders regardless of Woodwork Institute affiliation. Woodwork Institute Affiliates have been tested, and their work has been inspected by the Institute. Woodwork Institute inspectors will re-inspect Certified Compliance projects at no charge if there are any questions as to compliance.

#### **Before delivery to the job site, provide a Woodwork Institute Certified** **Compliance Certificate indicating the countertops being supplied and certifying that they fully meet the requirements of the grade, or grades specified.**

#### **At completion of installation, provide a Woodwork Institute Certified Compliance Certificate indicating the products installed and certifying that the installation of these products fully meets the requirements of the grade, or grades specified.**

#### **All fees charged by the Woodwork Institute for their Certified Compliance program are the responsibility of the millwork manufacturer and/or installer and shall be included in their bid.]**

### **[Monitored Compliance Program (MCP):**

The Monitored Compliance Program requires that work be inspected by Woodwork Institute inspectors at each phase of manufacturing and installation. Reports are issued after each inspection itemizing any noncompliant findings.

#### **All millwork and the installation thereof for this project shall be monitored for compliance to the contract documents by a Woodwork Institute Architectural Services Representative.**

##### **Full details of the Woodwork Institute Monitored Compliance Program may be found at the Institute website at** [**www.woodworkinstitute.com**](http://www.woodworkinstitute.com) **or by calling the administrative office at (916) 372-9943.**

#### **Millwork and/or installation found to be noncompliant (and not corrected) will be rejected.**

#### **Issuance of a Monitored Compliance Certificate is a prerequisite of acceptance.**

#### **All fees charged by the Woodwork Institute for its Certified Compliance program are the responsibility of the millwork manufacturer and/or installer and shall be included in their bid.]**

### Qualification:

Millwork subcontractors do not need to be WI licensees to participate in the certification programs. Licensees are, however, prequalified in that their work has been inspected by WI staff, and they have passed a test on *NAAWS.*

#### **[An Accredited Millwork Company in good standing of the Woodwork Institute]**

#### The countertop manufacturer with no less than 5 years of production experience similar to a specific project, whose qualifications indicate the ability to comply with the requirements of this section

#### The countertop manufacturer must have had at least one project in the past 5 years where the value of the woodwork was within 20 percent of the cost of woodwork for this project.

### Single source responsibility: A single manufacturer shall provide and install the work described in this Section.

## DELIVERY STORAGE AND HANDLING

### Deliver materials only when the project is ready for installation and the general contractor has provided a clean storage area.

#### Delivery of architectural millwork shall be made only when the area of operation is enclosed, all plaster and concrete work is dry and the area broom clean.

#### Maintain indoor temperature and humidity within the range recommended by the *North American* *Architectural Woodwork Standards* for the location of the project.

## SCHEDULING

### Coordinate fabrication, delivery, and installation with the general contractor and other applicable trades.

# PRODUCTS

## PLASTIC LAMINATE COUNTERTOPS

If there are no plastic laminate countertops on your project, delete all of 2.1.

### Grade: *NAAWS* **[Premium][Custom]** Grade.

### Laminate:

The chemical properties of these products are not identical. None of them are impervious to strong acids. They are suitable for applications where the reagents are mild and the exposures moderate.

#### Chemical-resistant plastic laminate:

##### Wilsonart Chemsurf

##### Formica Chemtop 2

##### Laminex

##### Approved Equal

#### Flat Tops: ISO 4586-3 Grade HGS. 0.048 inch thick.

#### Formed Tops: ISO 4586-3 Grade HGP. 0.039 inch thick.

#### **[Manufacturer, pattern] [As indicated on drawings] [As selected by the architect]**

When you make the selection in 4, above, you will effectively have selected the manufacturer. Chemical-resistant laminate is available in a limited selection of colors, so it may be possible for the subcontractor to substitute one manufacturer for another. If there is some reason to insist on one laminate brand (superior chemical resistance, for example), you may wish to modify or delete 2.1 B1.

### Core material: **[Moisture-resistant particleboard: ANSI 208.1 Grade M-3 MR-50] [Moisture-resistant MDF: ANSI 208.2 Grade 155 MR-50] [Hardwood plywood with a non-telegraphing grain, manufactured with exterior glue]**

Particleboard and MDF are satisfactory in most environments. Grade MR-50 moisture resistance is pretty good. Plywood is stronger and somewhat more water resistant, but it is prone to warp. Do specify MR-50 grade particle board or MDF; there are ‘water resistant’ grades that are less so.

### Backing sheet: **[ISO 4586-3 Grade BKL. 0.020 inch thick] [Meeting the requirements of *NAAWS*]**

### Backsplash detail: **[Square butt joint,] [Cove,] [Per drawings,] [\_\_\_\_]** inches (millimeters) high

There are other possible backsplash details: See Section 11 of *NAAWS.*

#### **[Splash construction: [Deck mount] [Wall mount]]**

Include 1 if you have butt joint backsplashes. The deck mount method is required at plastic laminate countertops. If the backsplash is fastened to the wall, rather than the countertop, a gap between the bottom of the backsplash and the deck will develop over time.

If several backsplash details are used, label “per drawing,” and be sure all countertops are clearly detailed in the plans.

#### Front edge: **[Self-edge] [No-drip bullnose edge] [Waterfall edge] [No-drip tilt edge] [Three millimeter PVC matching the color and pattern of the laminate] [Wood edge] [As indicated on drawings]**

There are edge details that are not listed. See *NAAWS*, Section 11, for more choices. As mentioned above, if several details are to be used, make sure they are clearly shown and labeled on the plans.

### Cutouts: Seal edges of cutouts in sink tops with a color toned (for verification) water-resistant sealer before sinks are installed.

## EPOXY RESIN COUNTERTOPS

### Grade: *NAAWS* **[Premium][Custom]** Grade.

### Epoxy resin:

Mostly the color is black. Other colors may be less chemical-resistant.

#### Meeting the requirements of *NAAWS*.

#### Meeting the chemical-resistance requirements of SEFA-3.

#### 1-inch minimum thickness

### Backsplashes:

If both backsplash details are used, call out “per drawings,” and be sure all countertops are clearly detailed and labeled in the plans.

#### Height: \_\_ inches.

#### Top detail: **[Chamfer] [Reagent shelf] [As shown in drawings]**

### Front edges: **[Marine edge] [Bullnose] [Square with chamfer]** with drip groove.

# EXECUTION

## EXAMINATION

### Verify the adequacy and proper location of any required backing or support framing.

### Verify that mechanical, electrical, plumbing, and other building components affecting work in this section are in place and ready.

## INSTALLATION

### Install all work in conformance with the *North American* *Architectural Woodwork Standards*, latest edition.

#### Installation shall conform to the *NAAWS* grade of the items being installed.

### All work shall be secured in place, square, plumb, and level.

### All work abutting other building components shall be properly scribed.

### Provide plumbing and electrical chases and access panels as required.

### Equipment and plumbing holes and cutouts shown on plans shall be cut by the installer.

### Install epoxy resin and polypropylene sinks and cup sinks, strainers, and tailpieces.

## ADJUSTING AND TOUCH UP

### All nicks, chips, and scratches in the finish shall be filled and retouched. Damaged items that cannot be repaired shall be replaced.

## CLEANUP

### Upon completion of installation, the installer shall clean all installed items of pencil and ink marks and broom clean the area of operation, depositing debris in containers provided by the general contractor.

END OF SECTION