

**Public Comments**  
**Architecture & Construction Standards**

**Architecture & Construction Exhibit 1**

**Date Submitted: November 12, 2015**

**Mike Mills, Educator**

I think the standards are still so vague. I don't know how a student would ever be expected to pass a standardized test on Cabinetmaking with these vague standards. Plus each teacher could interpret the standards differently since they are so vague.

Cabinetmaking Standard: 1.1: Apply hand/power tool and lab safety.

With industry I am not sure many cabinet shops are using hand tools. I do not think for a cabinetmaking class this is a realistic standard. If you are building cabinets you are probably not doing with hand tools like, hand saws, planes, etc.

If you are talk about hand tools like levels, squares, screw drivers, etc there really is not a lot of safety to talk about. I would rather see the standard say power tools and stationary machines. (Power tools being portable power tools, drills, circular saws, routers, etc. Machines meaning big machines that do not move out of the shop: planer, table saw, shapers--things that cannot be loaded in a truck and taken to a job site every day.

Cabinetmaking Standard 2.1: Investigate and examine career opportunities in cabinetry industry.

Limiting it to careers in the cabinetmaking industry is a little limiting. It would broaden the scope if it said careers related to cabinetmaking or careers in the Architecture and Construction Cluster.

Cabinetmaking Standard 3.1: Demonstrate proper use of appropriate math skills.

It says know the difference between measuring board feet and linear feet. The students do not need to know how to use the formula?

Cabinetmaking Standard 3.3: Demonstrate proper measuring and layout skills....Demonstrate use of the metric system

It is often difficult to get some of the students to understand the imperial system now we have also teach the metric system. Seems like we should pick one to try and master. I know the metric system is easier for most, but why are we going to teach metric?

Advanced Cabinetmaking Standard 2.2: Identify individual career goals in the cabinetry industry.

How does a student do this in our introductory style classes? A student would have my class for a max of 2 semesters. The student should have cabinetmaking career goals after 2 semesters? If I asked my students now I would guess most of them would say long term they do not have a goal to work specifically in the cabinetmaking industry. I would like to see this broaden to the entire Architecture and Construction Cluster career goals.

Advanced Cabinetmaking Standard 3.5: Develop a model that shows the conceptual understanding of a three dimensional form from a two dimensional drawing Example: Build or create three - dimensional form models

I am confused on this standard? What is a three dimensional form?

Advanced Cabinetmaking Standard 4.2: Identify the common grades of lumber and sheet goods.  
Examples: Select, #1, AC, etc.; FAS, rough cut lumber, S1S, S2S, etc.

To be honest I don't know if I could tell the difference by looking at solid lumber what is Select, premium or First and 2nds. I have 2 suppliers I work with and they call their grade differently. I know it all has to do with coloring and how much natural defects it has. Could a professional cabinet maker tell a difference is an A1 and B2 plywood just by looking?

### Architecture & Construction Exhibit 2

**Date Submitted: November 13, 2015**

**Jim Kayl, Educator**

We are working to develop an Electrical Technician course at the high school level. I would like to see the tech schools work with secondary level to develop a dual credit course (including standards) for students.

### Architecture & Construction Exhibit 3

**Date Submitted: December 3, 2015**

**Architecture & Construction Workgroup Committee Members:** Ty Barker, Richard Henn, Jim Mahoney, Jeff Schlepp, Eric Schramm, Mike Sees, Brian Voss

In Response to Exhibit 1-

**Standards being vague:** The committee followed the guidance of postsecondary faculty on both of the cabinet making courses. When the standards are unpacked it will bring more specific guidance about how each standard could be taught.

**Cabinetmaking Standard 1.1 Apply hand/power tool lab safety.** The committee felt that since this is an introductory course it is important to at least give the students exposure to hand tools first and teach them about their uses and how to use them safely before moving them to the power equipment.

Stationary equipment is considered power equipment, for instance a table saw and or a planer. Anything that uses electricity or another form of power is considered power equipment no matter if it is portable or stationary.

**Cabinetmaking Standard 2.1 Investigate and examine career opportunities in cabinetry industry:** The committee felt in all CTE courses career exploration needs to be addressed so that the students realize the different opportunities within this industry, for example design, sales etc. It will be up to each school and instructor to decide how broad or narrow they want to make this career exploration exercise. The important thing is that the students are exploring and getting a better understanding of the different careers, salaries, and education they will need to have a career in the different areas.

**Cabinetmaking Standard 3.1 Demonstrate proper use of appropriate math skills:** In writing the standards, the committee assumed that the formulas would be taught in all of the areas involved. These more specific examples of how the standard could be taught will be included when the standards are unpacked.

**Cabinetmaking Standard 3.3 Demonstrate proper measuring and layout skills ... Demonstrate use of the metric system:** The committee agreed that the metric system is not used that much, but industry representatives indicated students need to be familiar with the metric system as some machine setups still use the metric system. This standard is not intended to teach an in-depth metrics course, but only to expose the students to it.

**Advanced Cabinetmaking Standard 2.2 Identify individual career goals in the cabinetry industry:** The committee feels that all CTE courses should have a career exploration aspect to it. How the instructor chooses to teach it is up to them.

**Advanced Cabinetmaking Standard 3.5 Develop a model that shows the conceptual understanding of a three dimensional form from a two dimensional drawing, Example: Build or create three dimensional form models:** The committee's intent with this standard is to bring a design aspect to the advanced course, for example using cabinet making software to show the design of a kitchen and the cabinets within the kitchen to a potential customer (sales and design) or building a three dimensional model from a two dimensional drawing. Unpacking this standard will provide specific examples of how the standard could be taught.

**Advanced Cabinetmaking Standard 4.2 Identify common grades of lumber and sheet goods:** The intent of this standard is to teach the students that there are different grades of materials, how each grade has different uses and examples of when you would use the different grades in the cabinetmaking process.

<b>Architecture &amp; Construction Exhibit 4</b>
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**Date Submitted: December 14, 2015**

**Architecture & Construction Workgroup Committee Members:** Ty Barker, Richard Henn, Jim Mahoney, Jeff Schlepp, Eric Schramm, Mike Sees, Brian Voss

In Response to Exhibit 2-

The committee agrees with Mr. Kayl that it would be nice to have a dual credit course set up through one of the technical institutes to teach electrical wiring.

In the current standards the students are exposed to electrical wiring in the Building Trades course and Residential Construction course. Department of Education staff will work with the technical institutes to identify and clarify dual credit options that can be shared with schools.