



DEPARTMENT OF  
GENERAL SERVICES

BUREAU OF CAPITAL OUTLAY MANAGEMENT

Serving Government. Serving Virginians.

# BCOM Newsletter

Issue # 28  
April 2017

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- **New DGS & BCOM Websites**
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### **New DGS & BCOM Websites**

A new Department of General Services website encompassing all DGS business units went live in early April. The new DGS and BCOM websites are accessible at the following URLs, respectively: <https://dgs.virginia.gov> and <https://bcom.dgs.virginia.gov>

Included within the new DGS website is a new Forms Center, which is accessible from both the DGS and BCOM Home Pages. It is also directly accessible at the following URL: <https://forms.dgs.virginia.gov>

### **New DGS Website:**

DGS staff redesigned the new site to provide a consistent look and feel across all DGS business units. The new website employs "responsive design" which alters the display of content to automatically "best fit" the user's particular browsing device, be it a desktop, tablet, or smartphone.

The DGS homepage provides various ways for the user to quickly find information. In addition to a new search feature, "I want to ...," "I'm looking for ...," and "I need to contact ..." tabs highlight some of the more popular webpages. The top navigation bar allows you to go directly to any of DGS' eight business units, or you can scroll through the "For Business," "For Government," or "For Citizens" lists to access key DGS services.

#### *Other new features include:*

- Web forms that eliminate paperwork and make it easier to request fleet vehicle maintenance, mail pickup and other services, and provide customer feedback.
- Searchable lookups to quickly find your DGS contact for real estate transactions, building official reviews, procurement accounts, and more.
- Galleries to showcase surplus real estate available for sale, graphic design services, construction and renovation projects, DGS-maintained historic properties and more.



### New BCOM Website:

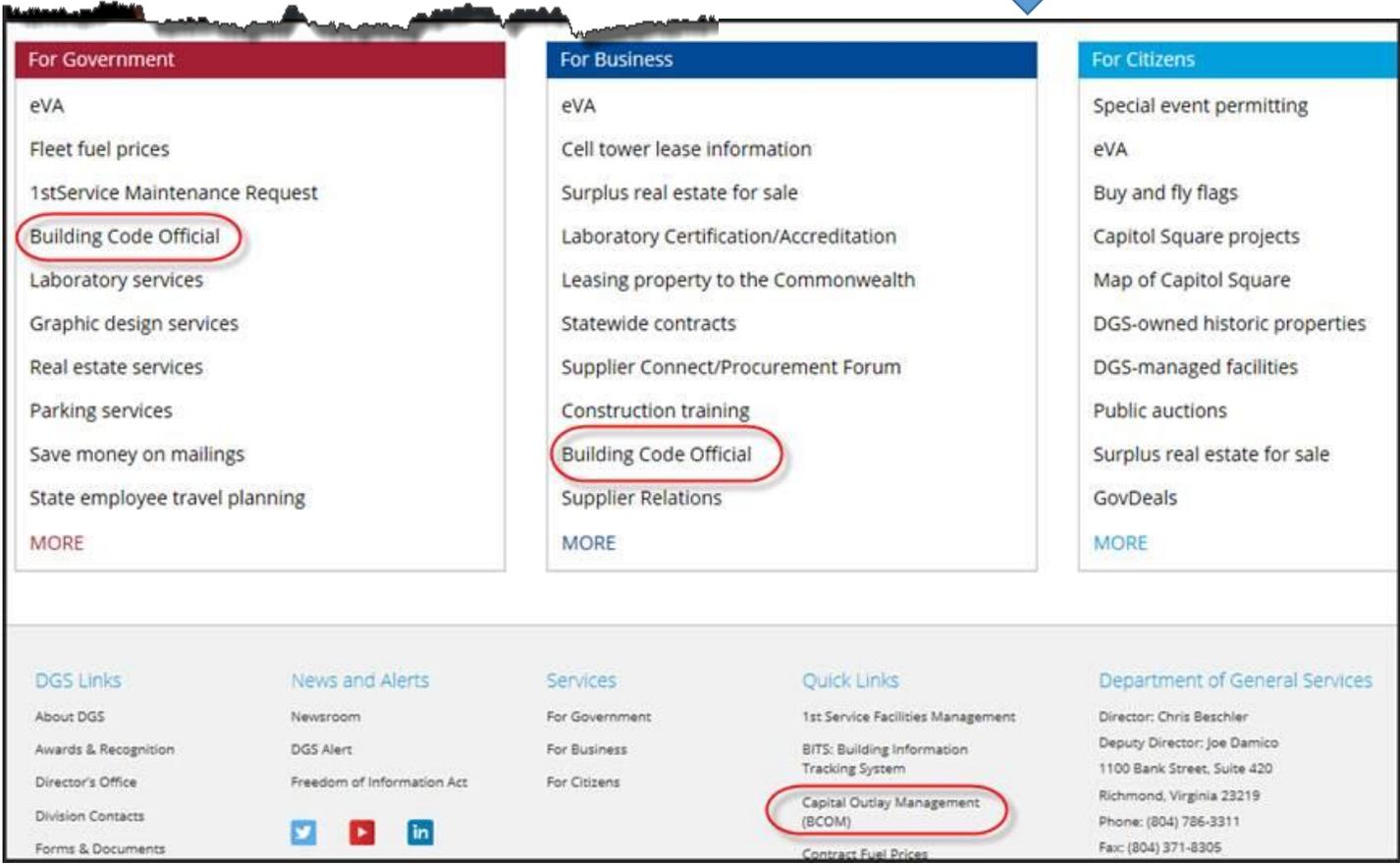
The quickest means to directly access the new BCOM website is via this URL: <https://bcom.dgs.virginia.gov>

The BCOM website may also be accessed via any of the following links located on the DGS Home Page:



Click on "Engineering and Buildings" menu at the top of DGS Home Page, then click on either of these two DEB menu items ...

... or click on any of these hyperlinks at the bottom of the DGS Home Page.



**New BCOM Website (continued):**

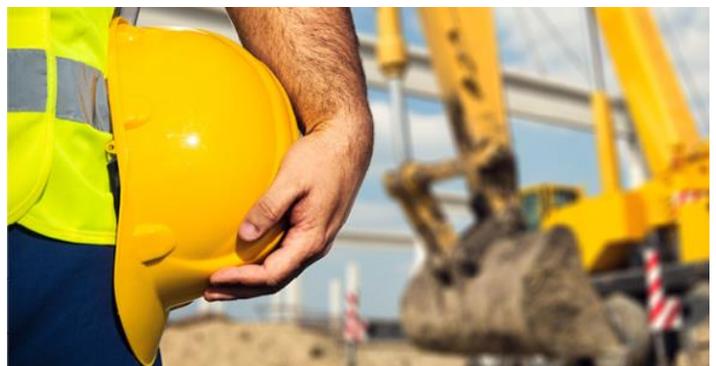
Once you reach the BCOM website, click on any category in the menu to display the associated webpages. For example under the "CPSM" grouping, you can access any of the four CPSM-related webpages shown below. The other categories contain links to the various BCOM webpages described below:

About BCOM	←	Describes BCOM’s responsibilities and provides the BCOM organization chart.
BITS	←	Contains a login link to access the BITS system, UAR forms for requesting BITS user accounts, and information for use by BITS Agency Access Coordinators (AACs).
CPSM	←	
About the CPSM		
Current CPSM Edition		
Prior CPSM Editions		Contains all DEB Notices issued to date. (DEB Notices are incorporated in subsequent issues of the CPSM.)
CPSM Training		Contains information regarding pool-funded projects and related processes, the Virginia Construction Cost Database, and Capital Budget Requests (CBRs).
DEB Notices	←	Contains information regarding Building Permit Policy, Annual Permits, Tent and other Temporary Structure Permits, and Communication Tower Permits.
Capital Cost Review	←	
State Building Official	←	Contains information regarding CPSM and VCCO Seminars.
Training	←	
Resources	←	Contains information regarding the AARB, alternative construction procurement procedures, the Construction Procurement Survey, courthouse facility condition assessments, debarment & enjoinder, and PPEA. Also included are hyperlinks to other useful webpages, not managed by BCOM, but related to the administration of construction and professional services.
Updates	←	
BCOM Jobs	←	Contains the BCOM Newsletter and a page to subscribe to same.
Forms & Documents	←	
Contacts	←	Contains information on job opportunities with BCOM.

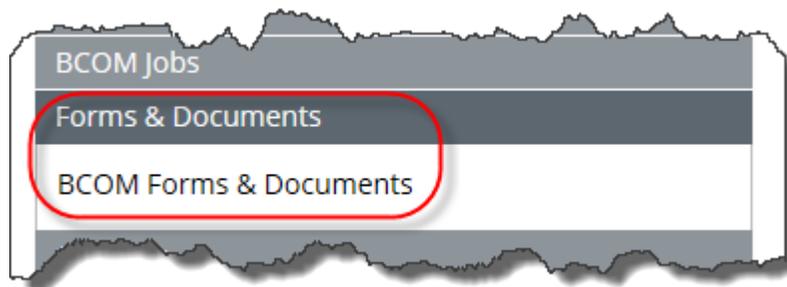
Contains contact information for BCOM staff, Lead and Cost Reviewer agency assignments, and a description of each of BCOM’s special email boxes.

Provides a direct link to BCOM-managed forms on the DGS Forms Center.



## New DGS Forms Center:

- The new DGS Forms Center is a significant improvement over the prior version.
- The new DGS Forms Center (now called "Documents and Forms") can still be accessed directly at: <https://forms.dgs.virginia.gov>
- Users can also click on the following "BCOM Forms & Documents" page on BCOM website's main menu to link to the DGS Forms Center:



The advantage of using the above link on the BCOM website (rather than the one on the DGS Home Page) is that it pre-filters the Forms Center to just BCOM's (and not other DGS business units') forms. This can also be applied by including "bcom" in the Forms Center filter as illustrated below.

### Virginia Department of General Services

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DGS
Engineering and Buildings
Laboratory Services
Procurement
Real Estate
Fleet
Graphics
Surplus
Mail

Home > Search > Documents and Forms

## Documents and Forms

FILTER

BCOM

Show Previous Versions

Form/Document Name/Title	Number	Description/Key Word	Date	Business Unit	File Type
<a href="#">A/E Contract Change Order</a>	DGS-30-100	CO-11ae	04/16	DEB-BCOM	Excel Doc
<a href="#">A/E Contract for Professional Services</a>	DGS-30-016	CO-3	07/15	DEB-BCOM	Word Doc
<a href="#">A/E Contract for Selected Professional Services</a>	DGS-30-028	CO-3.2	07/14	DEB-BCOM	Word Doc
<a href="#">A/E Fee Proposal Worksheet</a>	DGS-30-012	CO-2.3	03/17	DEB-BCOM	Excel Doc
<a href="#">A/E Firm Data Forms</a>	DGS-30-004	AE-1 – AE-6	03/17	DEB-BCOM	Excel Doc
<a href="#">A/E Invoice Format</a>	DGS-30-216	–	04/15	DEB-BCOM	Excel Doc

The **Filter** field is also quite an improvement over the past Forms Center. When typing in the filter, it will immediately search thru all six (6) columns simultaneously to find and display only those forms that match the search criteria. For example, type "bcom" and "fee" and immediately these results will appear:

**Documents and Forms**

FILTER   Show Previous Versions

Form/Document Name/Title	Number	Description/Key Word	Date	Business Unit	File Type
A/E Fee Proposal Worksheet	DGS-30-012	CO-2.3	03/17	DEB-BCOM	Excel Doc
General Conditions Fee Worksheet	DGS-30-468	-	04/14	DEB-BCOM	Excel Doc

Showing 1 to 2 of 2 entries (filtered from 248 total entries) Previous **1** Next

The Forms Center is sorted by default on the "Form/Document Name/Title" field, but it can be sorted on any column by clicking on the column header. The "Description/Key Word" field provides the common CPSM form name (e.g., CO-2.3) rather than the DGS Form Number (DGS-30-012). Here is an example of the forms list sorted by that column. It is recommended to always include "bcom" in the filter to avoid seeing other DGS groups' forms intermingled with BCOM's:

FILTER   Show Previous Versions

Form/Document Name/Title	Number	Description/Key Word	Date	Business Unit
Capital Outlay Management Forms Master List	DGS-30-000	(CO Forms Master List)	03/17	DEB-BCO
A/E Firm Data Forms	DGS-30-004	AE-1 - AE-6	03/17	DEB-BCO
Building Cost Summary	DGS-30-224	BCS	06/16	DEB-BCO
Standard Performance Bond	DGS-30-084	CO-10	09/07	DEB-BCO
Standard Labor and Material Payment Bond	DGS-30-088	CO-10.1	09/11	DEB-BCO
Standard Bid Bond	DGS-30-090	CO-10.2	12/07	DEB-BCO
Change Order (Construction Contract)	DGS-30-092	CO-11	02/16	DEB-BCO
Change Order Justification >>> is included within the DGS-30-092 / CO-11 form.	DGS-30-096	CO-11a	02/16	DEB-BCO

There is also a new feature called "Show Previous Versions" on the Forms Center. It is used for selective rather than all forms, but when it is checked, prior versions of those forms will appear. For example:

**Documents and Forms**

FILTER   Show Previous Versions

Form/Document Name/Title	Number	Description/Key Word	Date	Business Unit	File Type
Statement of VUSBC Special Inspections	DGS-30-048	CO-6a	04/15	DEB-BCOM	Excel Doc
Statement of VUSBC Special Inspections	DGS-30-048	CO-6a	10/13	DEB-BCOM	Excel Doc

*Annotations: Red arrows point to the "Show Previous Versions" checkbox and the two rows of data. The top row is labeled "current" and the bottom row is labeled "previous".*

## Dimensioning for Construction Tolerances

BCOM often cites deficiencies in the dimensions of building elements at substantial completion inspection. Corrections may involve many trades, at great expense and time. For example, the correction of an accessible water closet access might require demolition, relocation of the chair carrier, re-installation of wall tile, moving toilet partitions, new gypsum or masonry walls, and new plumbing. To avoid costly re-working of construction, BCOM recommends that the design professional take a proactive approach by preparing construction documents with dimensions that take into account variations in construction.

The 2012 Virginia Construction Code (VCC) addresses construction dimension requirements in the individual chapters of the Code.

The 2010 ADA Standards for Accessible Design (ASAD) specifically addresses construction dimensions along with construction industry and manufacturing tolerances and states in section 104.1:

ADA CHAPTER 1: APPLICATION AND ADMINISTRATION

AMERICANS WITH DISABILITIES ACT: SCOPING

**104.1.1 Construction and Manufacturing Tolerances.** All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points.

**Advisory 104.1.1 Construction and Manufacturing Tolerances.** Conventional industry tolerances recognized by this provision include those for field conditions and those that may be a necessary consequence of a particular manufacturing process. Recognized tolerances are not intended to apply to design work.

It is good practice when specifying dimensions to avoid specifying a tolerance where dimensions are absolute. For example, if this document requires "1½ inches," avoid specifying "1½ inches plus or minus X inches."

Where the requirement states a specified range, such as in Section 609.4 where grab bars must be installed between 33 inches and 36 inches above the floor, the range provides an adequate tolerance and therefore no tolerance outside of the range at either end point is permitted.

Where a requirement is a minimum or a maximum dimension that does not have two specific minimum and maximum end points, tolerances may apply. Where an element is to be installed at the minimum or maximum permitted dimension, such as "15 inches minimum" or "5 pounds maximum", it would not be good practice to specify "5 pounds (plus X pounds) or 15 inches (minus X inches)." Rather, it would be good practice to specify a dimension less than the required maximum (or more than the required minimum) by the amount of the expected field or manufacturing tolerance and not to state any tolerance in conjunction with the specified dimension.

Specifying dimensions in design in the manner described above will better ensure that facilities and elements accomplish the level of accessibility intended by these requirements. It will also more often produce an end result of strict and literal compliance with the stated requirements and eliminate enforcement difficulties and issues that might otherwise arise. Information on specific tolerances may be available from industry or trade organizations, code groups and building officials, and published references.

Note in the above Advisory, "Recognized tolerances are not intended to apply to design work."

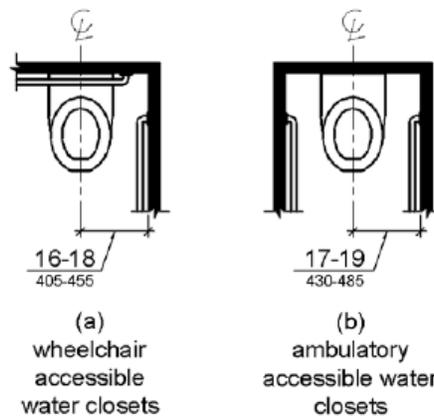
**General “Best Practices” when dimensioning:**

- When a dimension range is the regulatory requirement use the midpoint of the range as the drawing dimension.
- When a maximum or minimum dimension is the regulatory requirement use a drawing dimension that is less than maximum or more than minimum.

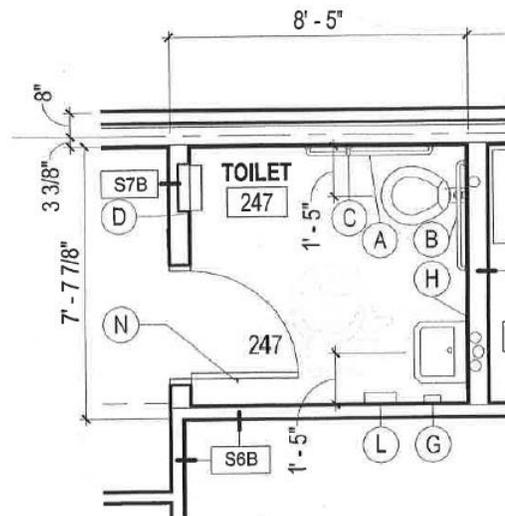
**Example 1 – Utilize the Midpoint Dimension:**

ASAD 604.2 requires the centerline of wheelchair accessible water closets to be 16 inches minimum to 18 inches maximum from the side wall or partition and ambulatory accessible water closets to be 17 inches minimum and 19 inches maximum. See figure 1a.

In this example, specific minimum and maximum end points are identified by ASAD 604.2. The range provides an adequate tolerance and therefore, no tolerance outside of the range at either end point is permitted. When a dimension range is the regulatory requirement, as shown in this example, consider using the midpoint of the range as the drawing dimension. See figure 1b.



**Figure 1a** – ASAD 604.2, Wheelchair vs. Ambulatory Accessible Water Closet Locations



**Figure 1b** – Dimension at midpoint range for Wheelchair Accessible Water Closet

**Example 2 – Dimension less than the Maximum:**

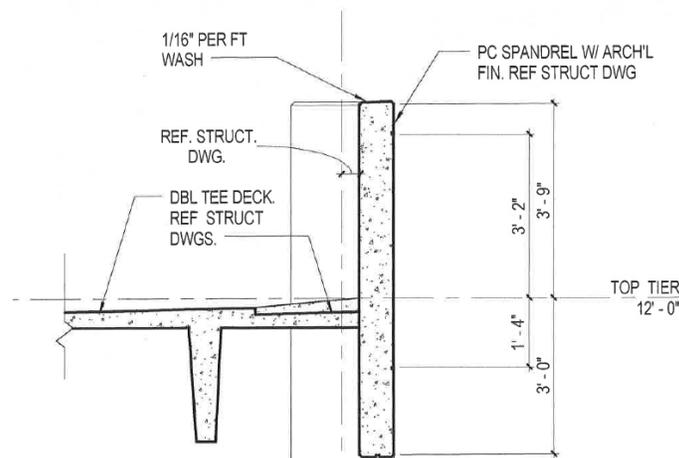
VCC 1010.3 and ASAD 405.2 require ramp runs to have a running slope not steeper than 1:12. Although ramps with a slope slightly less than 1:12 use more area, this loss in space will more than compensate for potential problems caused by rebuilding or litigation due to ramps exceeding the 1:12 slope. Designing with a slope less than the maximum is an easy way to avoid problems with construction tolerances. See figure 2 for an example.



**Figure 2** – Dimension ramp with slope less than 1:12

**Example 3 – Dimension more than the Minimum:**

VCC 1013.3 requires guards to be not less than 42 inches high, measured vertically from the adjacent walking surfaces. To avoid problems, this example of a parking deck guardrail is dimensioned to be 45 inches above the edge of the concrete wash. This extra three inches takes into account, industry precast concrete variations and installation tolerances. See figure 3.



**Figure 3** – Dimension guardrail more than the 42 inch minimum

**Conclusion:**

Getting dimensions right the first time is a win-win for everyone. Understanding and anticipating potential variations in construction can help minimize as-built mistakes and avoid the extra time and money necessary for costly construction revisions. This helps keep the project moving on schedule and within budget.