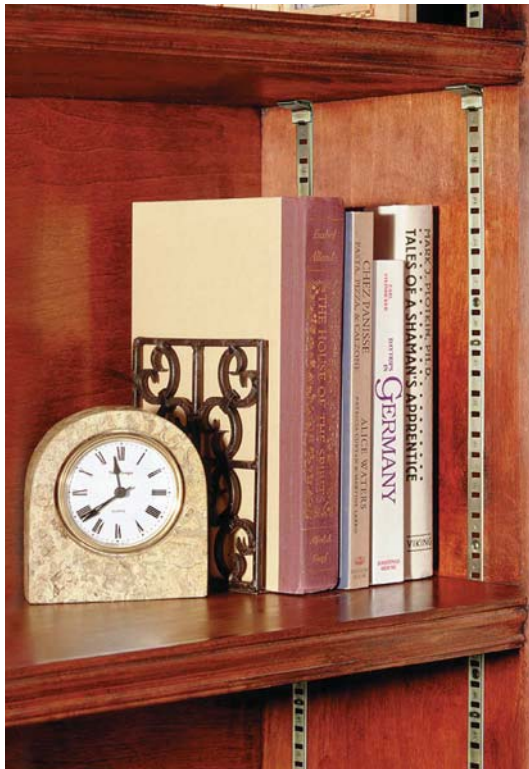


Heavy-Duty

BHMA Grade 1 Compliant
Adjustable in 1/2" increments

RECESSED STANDARDS AND CLIPS ARE
LOCATED IN WOOD CASEWORK.



233™/255™ Pilaster Standards and Supports

- Applications** For use on walls, in closets, between studs, within window frames and in bookcases, entertainment centers, kitchen cabinets and medicine cabinets. Color coordinated shelf clips add a finished look to custom projects.
- Load Rating** Varies per size*, BHMA grade 1 compliant
- Mounting** Wall
- Material** Steel or aluminum
- Finishes** Almond (ALM), Brass-look (BR), Brown (BRN), White (WH), Zinc (ZC), Economy Zinc (E): Attractive, long-lasting, corrosion resistant finishes
- Features** Clips are adjustable on 1/2" centers and provide stable support for a variety of shelf options, including wood, plywood, particle board, glass, wire or metal. Pilaster nail holes are pre-drilled. A variety of shelf support accessories are available.
- KV's built-in shelving hardware creates a custom look, while also providing sturdy, discreet support and outstanding versatility. Available in surface- or mortise-mount styles.

233 Series Surface-Mount Pilaster Standards

- For surface-mounted applications
- Dimensions: 13/16" wide x 3/16" deep x selected length
- 23-gauge high strength steel
- Vertically adjustable in 1/2" increments
- Stamped numbers make installation easier
- Pre-drilled screw/nail holes
- Pre-punched staple holes
- Made in the USA
- Available from open stock

255 Series Mortise-Mount Pilaster Standards

- For surface- or flush-mounted applications
- Dimensions: 5/8" wide x 3/16" deep x selected length
- Aluminum standards: 17-gauge aluminum
- Galvanized steel (E) standards: 20-gauge galvanized steel
- Steel standards: 23-gauge high strength steel
- Vertically adjustable in 1/2" increments
- Stamped numbers make installation easier
- Pre-drilled screw/nail holes
- Pre-punched staple holes
- Made in the USA
- Available from open stock

*Contact KV Customer Service for more information.

DATA ADDED IN REV 2

233™/255™ Pilaster Standards and Supports

233 Series Steel Pilaster Standards (surface-mount)

Steel (23-gauge)



Brass-look
(BR)



Zinc
(ZC)

Standard Pack (12"-60" packed 100 pieces; 72"-96" packed 50 pieces. Not packed with nails.)

Size	Brass-look (BR)	Zinc (ZC)	Steel (STL)
12"	233 BR 12	233 ZC 12	233 STL 12
18"	–	233 ZC 18	–
24"	–	233 ZC 24	233 STL 24
30"	–	233 ZC 30	–
36"	233 BR 36	233 ZC 36	233 STL 36
42"	–	233 ZC 42	–
48"	233 BR 48	233 ZC 48	233 STL 48
60"	233 BR 60	233 ZC 60	233 STL 60
72"	233 BR 72	233 ZC 72	233 STL 72
84"	–	233 ZC 84	233 STL 84
96"	233 BR 96	233 ZC 96	233 STL 96

PROVIDE ZINC
COLOR FINISH

Nails & Supports

Nails (For use with 233 and 255 standards.)

Standard Pack (Approx. 650 nails/bag. 5 bags/carton)

Finish:	Almond (ALM)	Brass-look (BR)	Bronzed (STB)*	White (WH)	Zinc (ZC)
Part #:	255-81N ALM	255-81N BR	255-81N STB	255-81N WH	255-81N ZC
Use with:	255 ALM	255 BR, 233 BR, 255AL BR	255 BRN, 255AL WAL	255 WH	255 ZC, 233 ZC, 255 E, 255AL

*For use with Brown (BRN) or Walnut (WAL) standards.



256
Patented



255-81N

256 Steel Shelving Supports (For use with 255 standards.)

Almond (ALM)	Brass-look (BR)	Walnut (WAL)**	White (WH)	Zinc (ZC)
Standard Pack (100 pieces/pack)				
256S ALM	256 BR	256 WAL	256S WH	256 ZC, 256R ZC***
Bulk Pack (B) (1000 pieces/pack)				
–	256B BR	256B WAL	–	256B ZC
Barrel Pack (BBL) (9000 pieces/fiber barrel)				
–	256BBL BR	256BBL WAL	–	256BBL ZC
Poly Pack (P) (12 supports + 28 nails/bag. 10 bags/carton.)				
256S P ALM	256P BR	256P WAL	256S P WH	256P ZC
Warehouse Pack (WP) (12 supports + 28 nails/bag. 50 bags/carton.)				
–	–	–	256S WP WH	256WP ZC

For use with 255 BRN standards. *256R includes a rubber cushion.



237



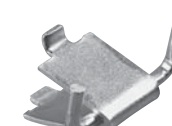
256R



239



238



244



242



757



243



229

Miscellaneous Supports

	Anochrome (ANO)	Zinc (ZC)
Description	Standard Pack (100 pieces/carton)	
Shelf Support (Use with 233 standards only.)	–	237 ZC
Shelf Support with Locator Tab (Use with 233 standards only.)	238 ANO	–
Shelf Support	–	239 ZC
Shelf Support for Wire Shelves (Use with 233 standards only.)	242 ANO	–
3" Shelf Bracket (Non-handed.)	–	243 ZC
Shelf Support for Wire Shelves	244 ANO	–
Shelf Support with Screw Holes	–	24276 ZC
Flange for 1-1/16" OD Closet Rod	757 ANO	–

256 Aluminum Shelving Supports

(For use with 255 standards.)

Natural Aluminum (AL NAT)
Standard Pack (100 pieces/pack)
256 AL NAT

229 Support Bracket

Standard Pack (25/box)

Size	Anochrome (ANO)
4"	229 ANO 4
6"	229 ANO 6
8"	229 ANO 8
10"	229 ANO 10

□ Non-stock item – minimum order quantities and additional lead time may apply.

NOTE: Slight variations in color/finish may occur when using different product materials, such as steel and aluminum shown here.

233™/255™ Pilaster Standards and Supports

255 Series Steel Pilaster Standards (surface or flush mount)

Standard Pack (12"-60" packed 100 pieces; 72"-96" packed 50 pieces. Not packed with nails.)						
Size	Almond (ALM)	Brass-look (BR)	Brown (BRN)	Economy Zinc (E)	White (WH)	Zinc (ZC)
12"	255 ALM 12	255 BR 12	255 BRN 12	255 E 12	255 WH 12	255 ZC 12
18"	255 ALM 18	255 BR 18	255 BRN 18	—	255 WH 18	255 ZC 18
24"	255 ALM 24	255 BR 24	255 BRN 24	255 E 24	255 WH 24	255 ZC 24
30"	255 ALM 30	—	255 BRN 30	—	255 WH 30	255 ZC 30
36"	255 ALM 36	255 BR 36	255 BRN 36	255 E 36	255 WH 36	255 ZC 36
42"	—	—	—	—	—	255 ZC 42
48"	255 ALM 48	255 BR 48	255 BRN 48	255 E 48	255 WH 48	255 ZC 48
60"	255 ALM 60	255 BR 60	255 BRN 60	255 E 60	255 WH 60	255 ZC 60
72"	255 ALM 72	255 BR 72	255 BRN 72	255 E 72	255 WH 72	255 ZC 72
84"	255 ALM 84	255 BR 84	255 BRN 84	255 E 84	255 WH 84	255 ZC 84
96"	255 ALM 96	255 BR 96	255 BRN 96	255 E 96	255 WH 96	255 ZC 96



Almond (ALM)
(steel shown)



Brass-look (BR)
(steel shown)



Brown (BRN)
(steel shown)



White (WH)
(steel shown)



Zinc (ZC)
(steel shown)



Economy Zinc (E)
(steel shown)

255 Series Aluminum Pilaster Standards

Standard Pack (12"-60" packed 100 pieces; 72"-96" packed 50 pieces. Not packed with nails.)				
Size	Natural Aluminum (AL)	Brass-look (BR)	Brown (BRN)	Walnut (WAL)
12"	255AL 12	255AL BR 12	255AL BRN 12	255AL WAL 12
18"	255AL 18	255AL BR 18	—	255AL WAL 18
24"	255AL 24	255AL BR 24	255AL BRN 24	255AL WAL 24
30"	255AL 30	255AL BR 30	—	255AL WAL 30
36"	255AL 36	255AL BR 36	255AL BRN 36	255AL WAL 36
42"	255AL 42	—	—	—
48"	255AL 48	255AL BR 48	255AL BRN 48	255AL WAL 48
60"	255AL 60	255AL BR 60	255AL BRN 60	255AL WAL 60
72"	255AL 72	255AL BR 72	255AL BRN 72	255AL WAL 72
84"	255AL 84	255AL BR 84	255AL BRN 84	255AL WAL 84
96"	255AL 96	255AL BR 96	255AL BRN 96	255AL WAL 96

DATA ADDED IN
REV 2



Natural Aluminum (AL)
(aluminum shown)



Brass-look (BR)
(aluminum shown)



Brown (BRN)
(aluminum shown)



Walnut (WAL)
(aluminum shown)

NOTE: Slight variations in color/finish may occur when using different product materials, such as steel and aluminum shown here.

233™/255™ Pilaster Standards and Supports



233
Pilaster Standard



255
Pilaster Standard

1. Product Name

233 and 255 Pilaster Standards. For built-in shelving and bookcase applications.

2. Manufacturer

Knap & Vogt® Manufacturing Company
2700 Oak Industrial Dr. NE, Grand Rapids, MI USA 49505-6026
616.459.3311 | www.kv.com

3. Product Description

Basic Use: 233 and 255 Pilaster Standards are designed for built-in shelving on walls, in closets, between studs and within window frames and bookcase applications.

233 and 255 Pilaster Standards are available in steel or aluminum. They mount to most wall types and in wood bookcases and cabinets. They accommodate KV steel or aluminum supports, and are available in various styles/configurations. 233 and 255 Pilaster Standards are adjustable on 1/2" centers.

Composition and Materials:

- 233 Steel Standards:** 23-gauge high strength steel.
- 255 Steel Standards:** 23-gauge high strength steel.
- 255 Galvanized Steel (E) Standards:** 20-gauge galvanized steel.
- 255 Aluminum Standards:** 17-gauge aluminum.

Sizes:

- 233 Steel Standards:** 13/16" wide x 3/16" deep x selected length. Lengths: 12", 18", 24", 30", 36", 42", 48", 60", 72", 84", and 96".
- 255 Steel Standards:** 5/8" wide x 3/16" deep x selected length. Lengths: 12", 18", 24", 30", 36", 42", 48", 60", 72", 84", and 96".
- 255 Aluminum Standards:** 5/8" wide x 3/16" deep x selected length. Lengths: 12", 18", 24", 30", 36", 42", 48", 60", 72", 84", and 96".

Finishes:

- 233 Steel Standards:** Brass-look (electro-plated cold rolled steel), and Zinc (zinc-plated cold rolled steel).
- 255 Steel Standards:** Almond, Brown or White (powder-coated cold rolled steel); Brass-look and zinc (zinc-plated cold rolled steel), and Economy Zinc (galvanized steel).
- 255 Aluminum Standards:** Aluminum; electro-plated aluminum), and Brown or Walnut (powder-coated aluminum).

4. Technical Data

Applicable Standards: The KV 255 Steel Standard, when used with specific KV steel shelf rests, has been tested and meets the ANSI/BHMA (A156.9-2003) cabinet hardware standard for shelf rests and standards. However, representative testing in a fully configured application is the only way to assure proper performance, durability, and safety.

The aforementioned shelf support load limit is intended as a guide only and not as a warranty. Actual load bearing capabilities depend upon the type of cabinet/wall material and use of appropriate shelf standard mounting fasteners, installation technique, shelf standard spacing, shelf size and construction.

Environmental Considerations:

Environment: Excessive humidity, salts, or other chemical agents can corrode the finish and attack metal or plastic components.

Fastening: Inadequate or incorrect fasteners can result in the standards pulling loose and causing damage.

Alignment: Improper standard and clip alignment can result in a system that is ineffective and unsafe.

5. Installation

233 Pilaster Standards can be installed on the surface. The 233 Pilaster Standard can be mounted with nails, staples, or screws.

255 Pilaster Standards can be installed on the surface, or made flush with the wall or cabinet by making a dado cut. The 255 Pilaster Standard can be mounted with nails, staples, or screws.

Surface mounting: Mark the installation location. Position the standards so that numbers are right-side up. Nail the top hole of the standards into the desired position at equal heights. Check horizontal and vertical alignment with a level. Finish nailing.

For wallboard, plywood paneling, masonry and other non-wood surfaces, use a #3 flat head screw and appropriate hollow wall anchor to properly secure the standard. Note: Proper nails are supplied for 255 Standards; screws and anchors are not.

Flush mounting: Mark the installation location and width of each standard, and rout each dado cut to the desired depth. Position the standards so that numbers are right-side up. Nail the top hole of the standards into the desired position at equal heights. Check horizontal alignment with a level. Finish nailing.

6. Availability and Cost

Availability: Knap & Vogt (KV) products are available from stocking distributors and through KV Representatives worldwide.

Cost: Current pricing is available from area KV Representatives. Please call for the nearest representative at: 800.253.1561.

7. Warranty

Limited Lifetime Warranty: Knap & Vogt offers its standard Limited Lifetime Warranty to the initial purchaser of commercial products. This warranty covers defects in materials and workmanship which occur during normal use, and the remedy is limited to repair or replacement of defective products, at KV's option. Certain types of defects and damage are excluded from warranty coverage, costs and expenses are not covered, and additional restrictions apply. A copy of the Limited Lifetime Warranty, with all warranty details, limitations and disclaimers, is available on the Customer Care Connection location at www.kv.com or from KV Customer Service, 2700 Oak Industrial Drive, Grand Rapids, MI 49505, (800) 253-1561.

8. Maintenance

233 and 255 Pilaster Standards require no maintenance. Inspect for proper fit periodically and adjust when necessary. Replace as required or recommended by application.

9. Technical Services

Knap & Vogt and area representatives can assist with any application. For further information, or for the name of the representative nearest you, please call Knap & Vogt Customer Service: 800.253.1561 or visit our website at: www.kv.com.

10. Filing Systems

Additional product information, data sheets, application sheets, and a full catalog are available upon request from Knap & Vogt.

DATA ADDED IN
REV 2



KNAPE & VOGT®

2700 Oak Industrial Dr. NE
Grand Rapids, MI 49505-6026 USA
1.800.253.1561 | 616.459.3311
Fax: 877.636.3290
www.kv.com

BHMA Knap & Vogt shelving products follow the ANSI testing standards established by BHMA.

This and other KV literature is available for download at www.kv.com > Resource Library
Knap & Vogt reserves the right to change product specifications at any time without notice and without incurring responsibility for existing units. This information conforms to editorial style prescribed by The Construction Specifications Institute.
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OL2251/1016

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB	
PROJECT NAME	
8274 BIG BEND BLVD	
ADDRESS	
NUMBER	
WEBSTER UNIVERSITY	
OWNER	
CANNON DESIGN	
ARCHITECT / ENGINEER	
DEVIN D GATES	
SUBMITTED BY	
123553-001 REV 2	
CONTRACTOR / CM SUBMITTAL NO.	CANNON DESIGN SUBMITTAL NO.
	123553
DRAWING / DETAIL REFERENCE	SPECIFICATION SECTION / PARAGRAPH
MANUFACTURER / SUPPLIER	ITEM / PRODUCT ID
REQUIRED DATE	PRIORITY
	CRITICAL

ITEM BEING SUBMITTED (check only one)

- | | | |
|--------------------------------------|--|--|
| ☐ Shop Drawings | ☐ Certification / | ☐ Coordination Drawing |
| ☐ Samples | ☐ Qualifications | ☐ Calculations |
| ☐ (____ copies) | ☐ Record Documents | ☐ Schedules |
| ☐ LEED Submittal | ☐ Product Data | ☐ O&M Manuals |
| ☐ Other _____ | | |

ITEM BEING SUBMITTED FOR (check only one)

- ☒ Action ☐ Information Only ☐ Record

REMARKS OR DEVIATIONS

Samples currently being produced, engineering judgement to confirm seismic requirements being calculated.

CONTRACTOR / CM CERTIFICATION (SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)



PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:

Devin D. Gates

DEVIN D GATES	1/31/17
REVIEWED BY	DATE

To be completed by Reviewer

12 3553-001 REV003
CANNON DESIGN SUBMITTAL NUMBER
2/1/17
RECEIVED DATE

- ☐ A. No Exceptions Taken
No further review of submittal is required.
- ☒ B. Make Corrections Noted
Incorporate corrections in work; resubmission is not required.
- ☐ C. Revise and Resubmit
Revise as noted, and resubmit for review.
- ☐ D. Rejected
Submittal is not in compliance with Contract Documents; provide new submittal.
- ☐ E. For Record / Information Only
Submittal was reviewed for Record / Information purposes only.
- ☐ F. Not Required for Review
Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS

☐ See attached sheet(s) for additional comments

RE-SUBMIT AS SEPARATE SUBMITTAL ONLY THE NON-APPROVED ITEMS.

SEE MARKUPS AND GENERAL COMMENTS ON NEXT PAGE.

APPROVAL OF MOBILE LABORATORY CASEWORK SYSTEM CONTINGENT ON APPROVED MANUFACTURER PER SPECIFICATIONS. PROVIDE SEPARATE SUBMITTAL CONFIRMING MANUFACTURER.

Kelvin Patel	2/14/17
REVIEWED BY	DATE

Digitally signed by Kelvin Patel
DN: C=US, E=kpatel@cannondesign.com, O=Cannon Design,
OU=Architect, CN=Kelvin Patel
Date: 2017.02.14 21:02:29-06'00'

GENERAL COMMENTS:

-ALL LAB CASEWORK TO MEET PERFORMANCE REQUIREMENT INFORMATION PER SPECIFICATION (SPEC.) 123553,1.3,A.

-TABLES TO MEET UL REQUIREMENT PER SPECIFICATION 123553,1.3,D.

-EW, DH & PRE-RINSE FIXTURE APPROVAL ON HOLD.

-ALL CABINETS (WOOD, METAL, FLAMMABLE, ACID) TO BE FLUSH OVERLAY.

-PRODUCT DATA FOR MOBILE LAB CASEWORK SYSTEM WHICH WAS PRESENT IN PREVIOUS SUBMITTAL WAS DELETED IN THIS RE-SUBMITTAL. THE MOBILE LABORATORY CASEWORK SYSTEM IS APPROVED PROVIDED IT IS ONE OF THE APPROVED MANUFACTURER PER SPECIFICATIONS, JAMESTOWN METAL PRODUCTS PER PREVIOUS SUBMITTAL. PROVIDE WRITTEN CONFIRMATION TO DOCUMENT THE MANUFACTURER & PRODUCT MEETS SPECIFICATIONS.

-PROVIDE WHITE COLOR CYLINDER RACKS.

-ALL PRE-WIRED TABLES CONNECTING TO FLOOR BOXES TO HAVE STANDARD ELECTRICAL PLUG.

-COORDINATE ALL ELECTRICAL OUTLETS WITH ELECTRICAL DRAWING & SPECIFICATIONS. TECHNICAL SPECIFICATIONS PER ELECTRICAL DRAWINGS.

PROVIDE SEPARATE SUBMITTAL FOR FOLLOWING:

-PROVIDE LOAD CAPACITY OF TABLES.

-PROVIDE SEPARATE SUBMITTAL OF TEST REPORTS FOR COUNTERTOP PER SPEC. 123553,1.5,C.

-HEAVY DUTY SLIDE PRODUCT DATA FOR GRADE 1HD-100 & 1HD-200 PER SPEC. 123553,2.12,E.

-PROVIDE PRODUCT DATA FOR V-5 AND A-5 (QUICK DISCONNECTS).

-PROVIDE PRODUCT DATA FOR E-5, E-6, D-5, D-6

-PROVIDE PRODUCT DATA FOR PAPER TOWEL DISPENSER.

-PROVIDE PRODUCT DATA FOR OVERHEAD SERVICE CARRIER & MOBILE LABORATORY CASEWORK SYSTEM (IDENTIFY MANUFACTURER).

-PROVIDE PRODUCT DATA FOR EPOXY COUNTERTOPS.

-PROVIDE SAMPLE & INFORMATION RELATED TO SIGNAGE FOR ACID (CORROSIVES) & FLAMMABLE CABINETS - CONSISTENT CLEAN GRAPHICS LETTERING.

-PROVIDE WHITE COLOR CYLINDER RACKS.

-ALL PRE-WIRED TABLES CONNECTING TO FLOOR BOXES TO HAVE STANDARD ELECTRICAL PLUG.



INSTITUTIONAL CASEWORK, INC.
1865 Highway 641 North
Paris, Tennessee 38242-8814
(731) 642-4251

DATE: 1/25/2017
JOB: 04437A, B, C, D
RE: Webster University
Webster Groves, MO

TO: Carroll Seating

ATTENTION: Eddie Scheer/Amanda Kohlbrecher

We are forwarding the following via FTP SITE:

- | | | |
|----------------|--------------------------|-----------------------------------|
| ● For Approval | For Review and Comment | As Requested |
| For Your Use | Returned for Corrections | ● Return <u>1</u> Prints and Sets |

COPIES	DATE	NO.	DESCRIPTION
1	1/25/17	04437ARI -E2 and 04337BRI -E4	Rough-In & Elevation Shop Drawings
1	1/25/17	04437DETAILS1 & 04437DETAILS2	Cabinet Sections
1	1/25/17	04437OHSC	OHSC detail/quantities Sheet
1	1/25/17	Set	Project Data Document

REMARKS:

We cannot schedule this project until we receive one copy indicating:

- ☐ Approval
- ☐ Casework finish
- ☐ Field dimensions

If you have any questions, please feel free to call.

CC:

BY: Mitzi A. Hutter