4Dimension[™] strut system
Frequently asked questions

PRODUCT FAO'S

Is 4Dimension strut UL/cUL listed?

Not at this time. Traditional B-Line strut is only UL listed as a raceway. A project is underway to have 4Dimension strut listed with UL and cUL as a raceway in 2015.

Since 4D22 is 10% lighter than B22, will the beam load ratings be less?

No. The innovative design of 4Dimension strut gives it a superior strength-to-weight ratio. So, even though 4D22 is 10% lighter, it has design uniform beam load ~10% higher than B22 and comparable deflection on lengths less than 6' and less deflection on lengths 6' and greater.

Will existing stock of strut fittings, clamps, and hardware work with 4Dimension strut?

Approximately 90% of traditional strut fittings will work with 4Dimension strut. Since the open channel dimensions are the same as traditional strut's open channel, most fittings and clamps will work. By using the new dovetail channel nuts, most fittings bolt to any side of the 4Dimension strut.

What is the difference between B22A and 4D22?

4D22 has four-sided functionality, takes up less space, and is more than 50% lighter when compared to B22A that has only two-sided functionality. Also, you can easily configure any special offset on the job-site using 4Dimension strut and accessories versus the need to special order welded configurations. Reference our catalog for engineering data on B22A & 4D22.

Will Snap 'N Shield™ work with 4Dimension strut 4D22 and 4D21?

Not at this time. We are working on a solution that will enable the Snap 'N Shield to work with 4Dimension strut. This solution will not be available until O3 2015.

How much time and material can I expect to save by using 4Dimension strut and accessories when installing a trapeze?

You can save up to 50% time and material when using 4Dimension strut and accessories as compared to using B22 or B22A on the same project. 4Dimension strut is an ideal solution for replacing B22A or layered trapeze applications. Also, the product saves space for single trapeze applications by reducing length up to 50% by using top and bottom of 4D22 or 4D21.



Can you explain the four-sided (4D22) and two-sided (4D21) functionality?

By using the new dove-tail channel nuts, most fittings bolt to all four sides of the 4D22 and two sides of 4D21 channel. The 4Dimension universal pipe clamps also have the ability to attach to all four sides of the 4D22 and two sides of the 4D21. When attaching to the side dove-tails, the two-piece strengthening clamp can be used to help ensure the open channel dimensions do not change, and it also helps improve performance (load rating). Reference our 4Dimension strut videos and catalog for more information.

With 4Dimension strut having a larger profile compared to traditional 1 % strut, are the bundles larger as well?

The 4Dimension strut bundles will have 320 ft. of product vs. 500 ft. of traditional strut bundles. The 4D22-120 bundle dimensions will be roughly 12"x12"x120". 4D21-120 bundles will be roughly 6"x12"x120".

What is the difference between standard 12GA 15%" x 15%" strut and 4Dimension strut 4D22?

For improved functionality and versatility, 4D22 has dove-tail features on three sides of the channel. With the 4Dimension channel nuts, you are able to attach most fittings to any side of the strut. The innovative design makes 4D22 ~10% lighter and ~10% stronger than B22 beam load ratings with less deflection. We also standardized on a larger SH hole diameter that will accommodate 5%" hardware. The dove-tail feature also accepts new innovative 4Dimension fittings that help reduce material & time in most applications.

Traditional B22 strut and fittings qualify for BuyAmerica, will the 4Dimension strut system qualify as well?

Yes, the 4Dimension strut system will qualify for BuyAmerica. 4Dimension strut is manufactured in the United States of America just like our traditional strut is today.

What are the savings and benefits of the 4Dimension strut system?

When using 4Dimension strut and accessories as a trapeze, building a rack, panel stand or strut ceiling grid, a contractor is able to save up to 50% in material and installation time. We developed an online calculator and instructional videos to assist in calculating and demonstrating the benefits of the 4Dimension strut system. Visit the resources section at www.cooperbline.com/4Dimension.

ENGINEERING/APPLICATION FAQ'S

Can 4Dimension strut be used for seismic applications?

No. 4Dimension strut is not OSHPD certified. B22 is still the seismic solution for OSHPD seismic bracing projects. More information regarding 4Dimension strut on seismic applications will be available in 2015.

In regard to general beam load and deflection, how does 4D22 compare to B22?

The innovative design of 4Dimension strut gives it a superior strength-to-weight ratio. Even though 4D22 is 10% lighter, it has design uniform beam load ~10% higher than B22 and comparable deflection on lengths less than 6' and less deflection on lengths 6' and greater.

What if I want to use 4Dimension strut on a project that specifically calls out 12GA, 15%" strut requirements?

The innovative design and increased material properties provide higher load ratings than existing 12GA, 1%" strut. For additional information, reference the letter from engineering located on the resource page of the 4Dimension website. This can be submitted to assist in using 4Dimension strut in place of 1%" strut.

MARKETING & COMMUNICATIONS FAQ'S

How much does 4Dimension strut cost?

Contact your local manufacturing rep for pricing. List price sheets for 4Dimension strut and accessories are available in the resources section at www.cooperbline.com/4Dimension.

Do you have a recommended initial stocking plan for the 4Dimension strut system?

Approximately 90% of traditional components are compatible with 4Dimension channel. Special mention should be given to unique components of the 4Dimension strut system, i.e. 4Dimension channel nuts, universal pipe clamps, new trapeze hangers, "back-to-back" solutions, beam clamps and post bases, to name a few. See recommended stock list and cross reference sheet under the resources section at www.cooperbline.com/4Dimension.

Is training available on how to assemble the new 4Dimension components?

The 4Dimension strut system website provides an extensive amount of literature, instructional videos, calculators, instruction sheets and more to help educate users on the 4Dimension products. Also, please contact your local manufacturing representative, distributor, or sales associate for more information.

Will existing stock of strut fittings, clamps, and hardware work with 4Dimension strut?

Approximately 90% of traditional strut fittings will work with 4Dimension strut. Since the open channel dimensions are the same as traditional strut's open channel, most fittings and clamps will work. By using the new dove-tail channel nuts, you are also able to bolt most fittings to any side of the 4Dimension strut.

Faton

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How does the loading of the dove-tail channel compare to the open channel?

The dove-tail channel was designed to accommodate applications that require %" and smaller hardware. The open channel was designed to accommodate applications that require ½" hardware and smaller. Reference the 4Dimension strut catalog for all published design loads.

How can I increase the general beam load of 4Dimension strut? How does it compare against B22A?

There are four ways to increase the beam load rating of 4Dimension strut: two-piece strengthening clamp, dual dove-tail channel nut, back-to-back snap on clamp, and dove-tail bar. Load charts for each of the options are located in the 4Dimension strut catalog.

How does 4Dimension strut perform for cantilever applications?

4Dimension strut performs the same as B22 in a cantilever application.

How can I get product drawings or submittals for my project?

All parts are located in CoSPEC. Visit www.cooperbline.com/CoSPEC for more information.

How can I get a sample of the 4Dimension strut?

Multiple sample kits are available. Contact your local sales representative on how to order.

Will 4Dimension strut be available for regular stock and flow business?

4Dimension strut will be stocked regionally across the United States and Canada.

What are the terms and conditions associated with 4Dimension strut?

The terms and conditions that are set for our traditional strut support system have been extended to the 4Dimension strut system. Reference the terms and conditions at www.bline.com.

What resources and tools exist for 4Dimension strut and accessories?

Current resources and tools include a flyer, catalog, value prop brochure, instruction sheets, price sheets, recommended stock and cross reference sheet, value prop video, instructional/training videos, sample kits, savings calculator, and CoSPEC.



For more information, visit www.cooperbline.com/4Dimension.

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