

WIDE-FLANGE SECTIONS

How much do you know about HSS?
Compared to wide-flange, HSS can offer designers and builders big advantages in strength, weight and labor costs.

Read on to learn some of the ways HSS outperform open sections across applications.



HSS CAN CARRY UP TO 50%

MORE AXIAL LOAD.

This makes them ideal for columns, especially when used with long, unbraced spans.

HSS ARE

200

STRONGER THAN OPEN SECTIONS IN RESISTING TORSIONAL LOADING.

In situations where high torsional loads are likely, HSS provide dramatically better resistance.

AVAILABLE STRENGTH BY UNBRACED LENGTH

HSS 22 x 22 x ¾ (212 pH)
W14x211

Member Length (ft.)

Wide-flange capacity drops off quickly as length increases, while HSS offer robust axial strength at all lengths.

HSS COLUMNS CAN WEIGH UP TO

50%
LESS FOR THE SAME STRENGTH.

That makes HSS easier on fabricators and contractors. It also saves owners substantially on material costs overall.

HSS resist torsional failure while wide-flange sections deform.

HSS use material more efficiently for axial load applications than wide-flange, giving you a smaller footprint in addition to lower weight for the same strength.



LESS SURFACE AREA THAN WIDE-FLANGE SECTIONS.

That means up to 50% less spent on paint, fireproofing, finishing and labor.

Additionally, the nooks and corners on wideflange sections lose coatings more quickly than flat surfaces, meaning more frequent maintenance compared to HSS.

HSS 10 x 10 x 3/4 have a surface area of 3.13 ft.2/ft.

W14x90 has surface area of 7.02 ft.2/ft.

ATLAS TUBE JUMBOHSS MADE IN AMERICA

Atlas Tube produces the world's largest HSS, helping builders go taller, wider and bigger than ever before. Compare one of our big new sizes to a similar wide-flange section to see the advantages you can get with Jumbo HSS.

ATLAS TUBI JUMBO HSS

20 x 20 x 1

KL = 40 F

2330 KIPS OF

6600 IN.4 TORSIONA

FOOTPRIN

6.40 FT.²/FT.

WIDE-FLANGE 14x426

KL = 40 FT.

KL - 40 F I.

2300 KIPS OF AXIAL CAPACITY*

331 IN.4 TORSIONAL CONSTANT

> 2.17 FT.² FOOTPRIN

8.28 FT.²/FT.

*Axial capacity per LRFD AISC 360-16

If you're interested in using HSS on your next project, we're ready to help. Give us a call to learn how HSS can help you save time and money on buildings of any size and start planning today.

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