

Bridge Weight Limits

Determine which Colorado bridges you can safely travel.

Be Prepared: Your number of axles, overall weight and how you disperse your load will determine your bridge safety color code. Follow these steps to determine which color code you should follow for Colorado bridge crossing safety.

Step 1: Determine your **Truck Type** based on number and type of axles.

• 3 Axle Truck, 3 Axle Full Trailer

• 3 Axle Truck, 2 Axle Trailer, 2 Axle Trailer

2 Axle Tractor, 1 Axle Semi-Trailer, 2 Axle Full Trailer
2 Axle Tractor, 2 Axle Semi-Trailer, 2 Axle Full Trailer
3 Axle Tractor, 1 Axle Semi-Trailer, 2 Axle Full Trailer
3 Axle Tractor, 2 Axle Semi-Trailer, 2 Axle Full Trailer
2 Axle Tractor, 2 Axle Semi-Trailer, 3 Axle Full Trailer

Type One: Single Unit Truck -Weight Limit: 27 Tons WEIGHT 2 to 6 axles LIMIT Type Two: Tractor and Semi-Trailer Weight Limit: 42.5 Tons • 2 Axle Tractor, 1 Axle Semi-Trailer • 2 Axle Tractor, 2 Axle Semi-Trailer • 3 Axle Tractor, 1 Axle Semi-Trailer • 3 Axle Tractor, 2 Axle Semi-Trailer • 3 Axle Tractor, 3 Axle Semi-Trailer Type Three: Tractor, Semi-Trailer and Full Trailer Weight Limit: 42.5 Tons • 2 Axle Truck, 1 Axle Balanced Trailer • 3 Axle Truck, 1 Axle Balanced Trailer • 2 Axle Truck, 1 Axle Full Trailer • 2 Axle Truck, 2 Axle Full Trailer • 2 Axle Truck, 3 Axle Full Trailer • 3 Axle Truck, 2 Axle Full Trailer



Step 2: Determine the Smallest Distance Between Axle Groups.

- An axle group is a group of consecutive axles where the space(s) between axles is more than 40 inches and less than 96 inches.
- The smallest space between axle groupings is used to measure weight bearing.

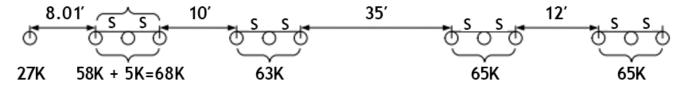
The following diagram illustrates an example of axle distance measurements. The distance between the front axle and the next axle back is marked as 14 feet. The distance between the axles closer to the back are marked as 35 feet.



Step 3: Know your Weight Per Axle Group.

Maximum weight is based on axle group weight. The diagram below shows the distances between axles as well as weight allowed on each axle group.

Drive Axle Group



This configuration has the maximum weight of 288,000 pounds which makes this truck and load safe to travel only on white color-coded Colorado bridges.



Step 4: Determine your Maximum Weight Allowed Per Axle Color Code.

The maximum allowed axle weights apply to all overweight permitted vehicles.

Notes:

- An additional 5,000 pounds may be added to the primary drive axle group per permitted vehicles, regardless of color code.
- All loads greater than 200,000 pounds require a Chapter 6 Special or Super Load permit.
- All loads on a Double Dolly require axle width consideration. See Appendix below.

The tables below show the maximum allowable weight per axle (x 1,000 pounds) based on the number of and distance between axle groups for orange, yellow or no/white coded state bridges.

Distance Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	36	39	43
Triple	49	53	58
Four or More	52	57	62

Distance Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	39	43	47
Triple	53	58	63
Four or More	57	62	68

Distance Between Axle Groups Greater than 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	42	46	50
Triple	55	60	65
Four or More	60	66	72

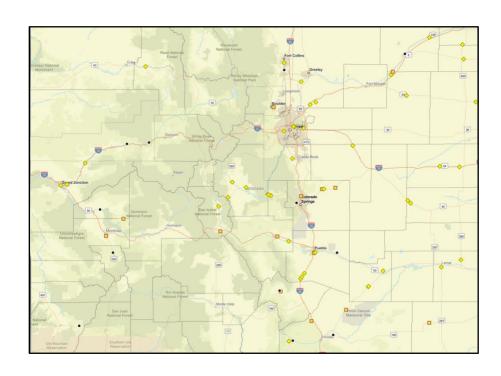


Step 5: Determine your **Color Code.**

Consult the **Bridge Weight Limit Restriction Dashboard** <u>map</u> to determine eligible bridges for travel, based on your load's color code. Color codes on the map are represented by colored shape icons as indicated below.

Load Color		Allowable Loads
Black (black circle with white outline)		No overweight trucks allowed.
Orange (orange square with darker outline)		Load weights, as found above, can cross Orange, Yellow or No/White coded state bridges.
Yellow (yellow diamond with darker outline)	\limits	Load weights, as found above, can cross Yellow or No/White coded state bridges.
No Color/White (white circle with black outline)	\bigcirc	Load weights, as found above, can cross No/White coded state bridges.
Your load doesn't meet any color code?		Load weight above maximums. These loads may not use Colorado State Highways.

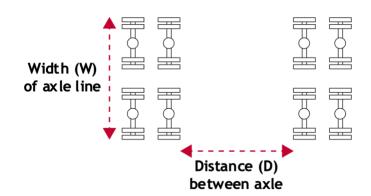
This screenshot of the interactive map on the Colorado Bridge Weight Limit Dashboard shows the color codes for bridges throughout the state.





Appendix: Double Dolly Charts of allowable weight per axle group (x 1,000 pounds).

A **Double Dolly** is two independent axles adjacent to each other creating an axle line. Each axle line consists of eight tires. This arrangement is typically used for transporting very large and heavy loads such as electrical transformers or refinery equipment.



Note: This is based on the AASHTO standard specifications for live load distribution factors for concrete deck on steel I-beams or on prestressed concrete girders.

Double Dolly Charts for Width (W) of Axle Up to Less than 10 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	36	39	43
Triple	49	53	58
Four or More	52	57	62

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	39	43	47
Triple	53	58	63
Four or More	57	62	68

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	42	46	50
Triple	55	60	65
Four or More	60	66	72

Axle Groups	Orange	Yellow	No Color/ White
Single	22	25	27
Tandem	42	46	50
Triple	55	60	65
Four or More	60	66	72



Double Dolly Charts for Width (W) of Axle 10 to Less Than 11 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	23.3	26.4	28.5
Tandem	38.1	42.2	45.5
Triple	51.8	56.6	61.3
Four or More	55.0	60.3	65.5

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	23.3	26.4	28.5
Tandem	41.2	45.5	49.7
Triple	56.0	61.3	66.6
Four or More	60.3	65.5	71.9

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	23.3	26.4	28.5
Tandem	44.4	48.6	52.9
Triple	58.1	63.4	68.7
Four or More	63.4	69.8	76.1

(D) Between Axle Groups More Than 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	23.3	26.4	28.5
Tandem	48.0	52.5	57.1
Triple	62.8	68.5	74.2
Four or More	68.5	75.4	82.2

Double Dolly Charts for Width (W) of Axle 11 to Less Than 12 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	24.5	27.9	30.1
Tandem	40.1	43.5	47.9
Triple	54.6	59.1	64.6
Four or More	57.9	63.5	69.1

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	24.5	27.9	30.1
Tandem	43.5	47.9	52.4
Triple	59.1	64.6	70.2
Four or More	63.5	69.1	75.8



Double Dolly Charts for Width (W) of Axle 11 to Less Than 12 Feet (Continued)

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	24.5	30.1	30.1
Tandem	46.8	55.7	55.7
Triple	61.3	66.9	72.4
Four or More	66.9	73.5	80.2

(D) Between Axle Groups More Than 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	24.5	27.9	30.1
Tandem	50.5	55.4	60.2
Triple	66.2	72.2	78.2
Four or More	72.2	79.4	86.6

Double Dolly Charts for Width (W) of Axle 12 to Less Than 13 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	25.8	29.3	31.6
Tandem	42.2	45.7	50.4
Triple	57.4	62.1	67.9
Four or More	60.9	66.8	72.6

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	25.8	29.3	31.6
Tandem	45.7	50.4	55.1
Triple	62.1	67.9	73.8
Four or More	66.8	72.6	79.7

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	25.8	29.3	31.6
Tandem	49.2	53.9	58.6
Triple	64.4	70.3	76.1
Four or More	70.3	77.3	84.3

Axle Groups	Orange	Yellow	No Color/ White
Single	25.8	29.3	31.6
Tandem	53.1	58.2	63.3
Triple	69.6	75.9	82.2
Four or More	75.9	83.5	91.1



Double Dolly Charts for Width (W) of Axle 13 to Less Than 14 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	27.0	30.7	33.2
Tandem	44.2	47.9	52.8
Triple	60.2	65.1	71.2
Four or More	63.9	70.0	76.2

Axle Groups	Orange	Yellow	No Color/ White
Single	27.0	30.7	33.2
Tandem	51.6	56.5	61.4
Triple	67.6	73.7	79.8
Four or More	73.7	81.1	88.4

(D) Between Axle Groups 12 to 14 feet

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	27.0	30.7	33.2
Tandem	47.9	52.8	57.8
Triple	65.1	71.2	77.4
Four or More	70.0	76.2	83.6

(D) Between Axle Groups More Than 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	27.0	30.7	33.2
Tandem	55.7	61.0	66.4
Triple	73.0	79.6	86.2
Four or More	79.4	87.6	95.5

Double Dolly Charts for Width (W) of Axle 14 to Less Than 15 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	46.3	50.2	55.3
Tandem	63.0	68.2	74.6
Triple	66.9	73.3	79.7
Four or More	46.3	50.2	55.3

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	50.2	55.3	60.5
Tandem	68.2	74.6	81.0
Triple	73.3	79.7	87.5
Four or More	50.2	55.3	60.5



Double Dolly Charts for Width (W) of Axle 14 to Less Than 15 Feet (Continued)

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	54.0	59.2	64.3
Tandem	70.7	77.2	83.6
Triple	77.2	84.9	92.9
Four or More	54.0	59.2	64.3

(D) Between Axle Groups More Than 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	58.3	63.9	69.4
Tandem	76.4	83.3	90.2
Triple	83.3	91.6	100.0
Four or More	58.3	63.9	69.4

Double Dolly Charts for Width (W) of Axle 15 to Less Than 16 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	29.6	33.6	36.2
Tandem	48.4	52.4	57.8
Triple	65.8	71.2	77.9
Four or More	69.8	76.6	83.2

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	29.6	33.6	36.2
Tandem	52.4	57.8	63.1
Triple	71.2	77.9	84.6
Four or More	76.6	83.2	91.3

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	29.6	33.6	36.2
Tandem	56.4	61.8	67.2
Triple	73.8	80.6	87.3
Four or More	80.6	88.6	96.7

Axle Groups	Orange	Yellow	No Color/ White
Single	29.5	33.6	36.3
Tandem	60.9	66.7	72.5
Triple	79.7	87.0	94.2
Four or More	87.0	95.7	104.4



Double Dolly Charts for Width (W) of Axle 16 to Less Than 17 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	30.8	35.0	37.8
Tandem	50.4	54.6	57.8
Triple	68.6	74.2	77.9
Four or More	72.8	79.8	83.2

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	29.6	35.0	37.8
Tandem	52.4	60.2	65.8
Triple	71.2	81.2	91.8
Four or More	76.6	86.8	95.2

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	30.8	35.0	37.8
Tandem	58.8	64.4	70.0
Triple	77.0	84.0	91.0
Four or More	84.0	92.4	100.8

(D) Between Axle Groups More Than 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	32.1	35.0	37.8
Tandem	66.1	69.9	75.6
Triple	86.5	90.7	98.2
Four or More	94.4	99.8	108.8

Double Dolly Charts for Width (W) of Axle 17 to Less Than 18 Feet

Axle Groups	Orange	Yellow	No Color/ White
Single	32.1	36.4	39.3
Tandem	52.5	56.8	62.7
Triple	71.4	77.2	84.7
Four or More	75.8	83.1	90.3

(D) Between Axle Groups 8 to 10 feet (D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	32.1	36.4	39.3
Tandem	56.8	62.7	68.5
Triple	77.2	84.5	91.8
Four or More	83.1	90.3	99.1



Double Dolly Charts for Width (W) of Axle 17 to Less Than 18 Feet (Continued)

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	32.1	36.4	39.3
Tandem	61.2	67.0	72.9
Triple	80.1	87.4	94.7
Four or More	87.4	96.2	104.9

(D) Between Axle Groups More Than 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	32.1	36.4	39.3
Tandem	66.1	72.4	78.7
Triple	86.5	94.4	102.3
Four or More	94.4	103.9	113.3

Double Dolly Charts for Width (W) of Axle 18 to Less Than 19 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	33.3	37.9	40.9
Tandem	54.5	59.1	65.1
Triple	74.2	80.3	87.8
Four or More	78.7	86.3	93.9

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	33.3	37.9	40.9
Tandem	59.1	65.1	71.2
Triple	80.3	87.8	95.4
Four or More	86.3	93.9	103.0

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	33.3	37.9	40.9
Tandem	63.6	69.7	75.7
Triple	83.3	90.9	98.4
Four or More	90.9	99.9	109.9

Axle Groups	Orange	Yellow	No Color/ White
Single	33.3	37.9	40.9
Tandem	68.7	75.2	81.8
Triple	89.9	98.1	106.3
Four or More	98.1	107.9	117.7

Double Dolly Charts for Width (W) of Axle 19 to Less Than 20 Feet

(D) Between Axle Groups 8 to 10 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	34.6	39.3	42.4
Tandem	56.6	61.3	67.6
Triple	77.0	83.3	91.1
Four or More	81.7	89.6	97.4

(D) Between Axle Groups 10 to 12 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	34.6	39.3	42.4
Tandem	61.3	67.6	73.9
Triple	83.3	91.1	99.0
Four or More	89.6	97.4	106.9

(D) Between Axle Groups 12 to 14 feet

Axle Groups	Orange	Yellow	No Color/ White
Single	34.6	39.3	42.4
Tandem	66.0	72.3	78.6
Triple	86.4	94.3	102.2
Four or More	94.3	103.7	113.1

Axle Groups	Orange	Yellow	No Color/ White
Single	34.6	39.3	42.4
Tandem	71.3	78.1	84.9
Triple	93.3	101.8	110.3
Four or More	101.8	112.0	122.1