

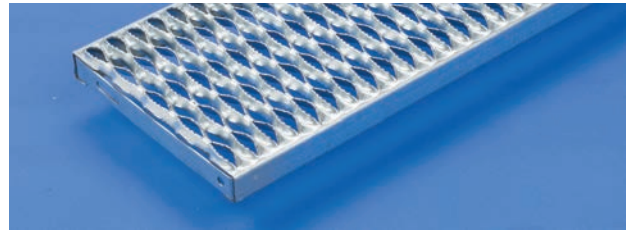
Stair Tread Information

Safe Loading — Stair Treads

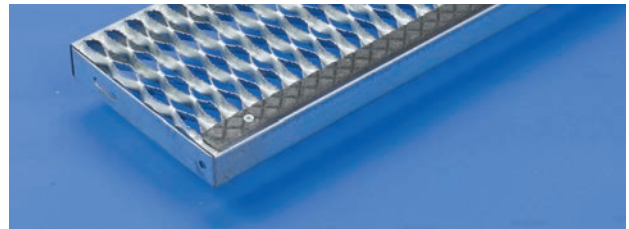
Load data below takes eccentric loads into consideration. Although load values include allowances for normal impact conditions and usual pedestrian traffic, be sure to make provisions in the structural design for special uses and loads involving unusual impact forces or vibratory forces. Load-carrying capacity of stair treads increases as side channel height and gauge or material increase.



Stair Tread Application



GRIP STRUT Stair Tread



GRIP STRUT Stair Tread with Abrasive Nosing

U=Uniform Load (lb./ft.²) C= Concentrated Load (lb.)

| | | 2-Diamond 4/4" Depth | | | | 3-Diamond 7" Depth | | | | 4-Diamond 9/2" Depth | | | | 5-Diamond 11/4" Depth | | | |
|-----------|-----------------------------|-------------------------|-----|------|-----|-----------------------|-----|------|-----|-------------------------|-----|------|-----|--------------------------|-----|-----|-----|
| Material | | Steel | | | | Steel | | | | Steel | | | | Steel | | | |
| Gauge | | 14 | | 12 | | 14 | | 12 | | 14 | | 12 | | 14 | | 12 | |
| Span | Channel Depth - in. (mm) | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C |
| 2'-0" | 1 1/2" (38.1) | 1191 | 472 | 1576 | 624 | 761 | 443 | 1006 | 587 | 549 | 435 | 750 | 595 | 434 | 425 | 575 | 563 |
| | 2" (50.8) | 1978 | 783 | 2513 | 995 | 1262 | 737 | 1604 | 936 | 911 | 604 | 1158 | 917 | 721 | 573 | 916 | 897 |
| 2'-6" | 1 1/2" (38.1) | 764 | 378 | 1011 | 500 | 488 | 356 | 645 | 470 | 353 | 349 | 481 | 476 | 278 | 342 | 369 | 452 |
| | 2" (50.8) | 1268 | 611 | 1611 | 797 | 810 | 590 | 1029 | 750 | 584 | 578 | 742 | 734 | 463 | 566 | 587 | 719 |
| 3'-0" | 1 1/2" (38.1) | 532 | 315 | 703 | 418 | 340 | 300 | 450 | 393 | 245 | 300 | 335 | 398 | 194 | 300 | 258 | 378 |
| | 2" (50.8) | 882 | 524 | 1121 | 665 | 563 | 492 | 716 | 626 | 407 | 483 | 517 | 614 | 322 | 473 | 409 | 601 |
| 4'-0" (1) | 2" (50.8) | 498 | 394 | 633 | 501 | 318 | 372 | 404 | 472 | 230 | 364 | 292 | 463 | 182 | 356 | 232 | 454 |

(1) Intermediate stringer is recommended for spans over 4 feet.

| | | 2-Diamond 4/4" Depth | | | | 3-Diamond 7" Depth | | | | 4-Diamond 9/2" Depth | | | | 4-Diamond 9/2" Depth | | | | 5-Diamond 11/4" Depth | | | | 5-Diamond 11/4" Depth | | | |
|-----------|------------------------------|-------------------------|-----|-------|-----|-----------------------|-----|-------|-----|-------------------------|-----|-------|-----|-------------------------|-----|------|-----|--------------------------|-----|-------|-----|--------------------------|-----|------|-----|
| Material | | Aluminum | | | | Aluminum | | | | Aluminum | | | | Stainless Steel | | | | Aluminum | | | | Stainless Steel | | | |
| Gauge | | .080" | | .100" | | .080" | | .100" | | .080" | | .100" | | 304 | | 316L | | .080" | | .100" | | 304 | | 316L | |
| Span | Channel Depth in. (mm) | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C | U | C |
| 2'-0" | 2" (50.8) | 1328 | 526 | 1862 | 737 | 862 | 503 | 1208 | 705 | 607 | 481 | 867 | 687 | 610 | 483 | 525 | 416 | 396 | 388 | 607 | 595 | 394 | 386 | 338 | 331 |
| 2'-6" | 2" (50.8) | 850 | 420 | 1191 | 590 | 551 | 402 | 773 | 564 | 388 | 392 | 555 | 550 | 390 | 387 | 336 | 336 | 253 | 388 | 388 | 540 | 252 | 381 | 216 | 339 |
| 3'-0" | 2" (50.8) | 590 | 350 | 827 | 491 | 383 | 335 | 537 | 470 | 270 | 327 | 385 | 458 | 271 | 323 | 233 | 279 | 176 | 321 | 270 | 450 | 175 | 319 | 150 | 275 |
| 4'-0" (1) | 2" (50.8) | 332 | 263 | 465 | 369 | 215 | 252 | 302 | 353 | 152 | 245 | 216 | 344 | 152 | 244 | 131 | 210 | 99 | 241 | 151 | 338 | 98 | 241 | 84 | 221 |

(1) Intermediate stringer is recommended for spans over 4 feet.

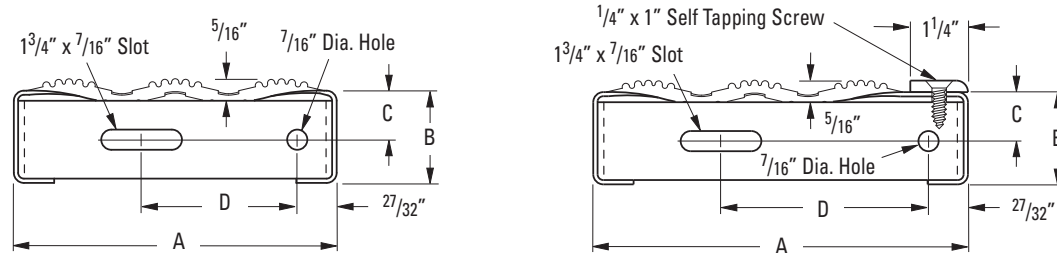
Stair Tread Information

Standard Sizes and Recommended Spans ⁽¹⁾

| Steel | | Standard Stair Treads | | | Stair Treads with Abrasive Nosing | |
|------------------------|---------------------|-----------------------|----------------|--|-----------------------------------|--|
| Span in. | Gauge | Channel Depth - in. | Catalog Number | Size in. | Catalog Number | Size in. |
| Up to 30" | 14 | 1 1/2" | T-21514 | 2-Diamond - 4 ³ / ₄ " | -- | -- |
| | | | T-31514 | 3-Diamond - 7" | T-31514-N | 3-Diamond - 8 ¹ / ₈ " |
| | | | T-41514 | 4-Diamond - 9 ¹ / ₂ " | T-41514-N | 4-Diamond - 10 ¹ / ₂ " |
| | | | T-51514 | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| 30" to 36" | 14 | 1 1/2" | T-21514 | 2-Diamond - 4 ³ / ₄ " | -- | -- |
| | | | T-31514 | 3-Diamond - 7" | T-31514-N | 3-Diamond - 8 ¹ / ₈ " |
| | | | T-41514 | 4-Diamond - 9 ¹ / ₂ " | T-41514-N | 4-Diamond - 10 ¹ / ₂ " |
| | | | T-51514 | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| 36" to 42" | 14 ga. | 1 1/2" | T-21514 | 2-Diamond - 4 ³ / ₄ " | -- | -- |
| | | | T-31514 | 3-Diamond - 7" | T-31514-N | 3-Diamond - 8 ¹ / ₈ " |
| | | | T-41514 | 4-Diamond - 9 ¹ / ₂ " | T-41514-N | 4-Diamond - 10 ¹ / ₂ " |
| | | | T-51514 | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| 42" to 48" | 14 ga. | 2" | T-21514 | 2-Diamond - 4 ³ / ₄ " | -- | -- |
| | | | T-31514 | 3-Diamond - 7" | T-31514-N | 3-Diamond - 8 ¹ / ₈ " |
| | | | T-41514 | 4-Diamond - 9 ¹ / ₂ " | T-41514-N | 4-Diamond - 10 ¹ / ₂ " |
| | | | T-51514 | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| Aluminum | | | | | | |
| Up to 42" | .080" | 2" | T-22012-A | 2-Diamond - 4 ³ / ₄ " | -- | -- |
| | | | T-32012-A | 3-Diamond - 7" | T-32012-A-N | 3-Diamond - 8 ¹ / ₈ " |
| | | | T-42012-A | 4-Diamond - 9 ¹ / ₂ " | T-42012-A-N | 4-Diamond - 10 ¹ / ₂ " |
| | | | T-52012-A | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| Up to 48" | .100" | 2" | T-22010-A* | 2-Diamond - 4 ³ / ₄ " | -- | -- |
| | | | T-32010-A* | 3-Diamond - 7" | T-32010-A-N | 3-Diamond - 8 ¹ / ₈ " |
| | | | T-42010-A* | 4-Diamond - 9 ¹ / ₂ " | T-42010-A-N | 4-Diamond - 10 ¹ / ₂ " |
| | | | T-52010-A* | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| Stainless Steel | | | | | | |
| Up to 30" | Type 316L 16 ga. | 2" | T-42016-SL | 4-Diamond - 9 ¹ / ₂ " | -- | -- |
| | | | T-52016-SL | 5-Diamond - 11 ³ / ₄ " | -- | -- |
| Up to 36" | Type 304 16 ga. | 2" | T-42012-A | 4-Diamond - 9 ¹ / ₂ " | -- | -- |
| | | | T-52012-A | 5-Diamond - 11 ³ / ₄ " | -- | -- |

(1) Recommendations are based on approximate minimum loads of 300 lbs. concentrated; 100 lbs. uniform. Specific performance criteria may vary by municipality/building code body and should be locally checked prior to finalizing specifications.

* Available on special order.



Steel, Aluminum and Stainless Steel ⁽¹⁾

| Standard | | | | With Abrasive Nosing | | | |
|----------------------------------|--------|------|---------------------------------|----------------------------------|--------|------|---------------------------------|
| A | B | C | D | A | B | C | D |
| 4 ³ / ₄ " | 1 1/2" | 3/4" | 2 ⁵ / ₈ " | -- | -- | -- | -- |
| (2-Diamond) | 2" | 1" | 2 ⁵ / ₈ " | -- | -- | -- | -- |
| 7" | 1 1/2" | 3/4" | 3 ³ / ₈ " | 8 ¹ / ₈ " | 1 1/2" | 3/4" | 4 ¹ / ₂ " |
| (3-Diamond) | 2" | 1" | 3 ³ / ₈ " | (3-Diamond) | 2" | 1" | 4 ¹ / ₂ " |
| 9 ¹ / ₂ " | 1 1/2" | 3/4" | 5 ⁷ / ₈ " | 10 ¹ / ₂ " | 1 1/2" | 3/4" | 6 ⁷ / ₈ " |
| (4-Diamond) | 2" | 1" | 5 ⁷ / ₈ " | (4-Diamond) | 2" | 1" | 6 ⁷ / ₈ " |
| 11 ³ / ₄ " | 1 1/2" | 3/4" | 8 ¹ / ₈ " | -- | -- | -- | -- |
| (5-Diamond) | 2" | 1" | 8 ¹ / ₈ " | -- | -- | -- | -- |

(1) Stainless Steel not available in 2-Diamond or 3-Diamond widths.