

ALL-THREAD BAR



Strengthen your project with grade 80 all-thread bar

CMC's all-thread bar features a continuous hot-rolled pattern of threaded deformations along its entire length so it can be cut and coupled in the field at any point, allowing for job site flexibility. Rolling the thread form onto the bar during the manufacturing process produces a durable thread, and the deformations allow nuts and couplers to thread onto the bars at any position. Our all-thread bar offers a simple, reliable splice that requires less time for assembly than welded or swaged splices.

Quality and Testing

CMC's all-thread bar is produced to meet the mechanical properties detailed on the second page. Throughout the entire production process, careful attention to detail is paid to ensure that we produce only the highest-quality product. Our product meets the mechanical properties specified in ASTM A615*.

Welding

Specific provisions regarding welding of all-thread bars are not available, so care should be taken. Use ANSI/AWS D1.4 as a reference for procedures to follow.

Accessories

We offer a full range of all-thread bar accessories to meet your needs. Couplers, full strength nuts, and jam nuts are available in sizes up to #24. Accessories for #14 to #24 have a round collar style with flats machined onto the outer diameter, and accessories for #11 and below are a hex style. All hardware has been designed and tested to achieve 125% minimum yield strength of the bar, as defined by ACI. Please contact our sales team for more information or to place an order.



BENEFITS

1
More reliability and consistency than welded or swaged splices

2
Cost-efficient steel system

3
Design flexibility

FOR MORE INFORMATION:

website:
cmc.com

email:
cmcallthread@cmc.com

or contact:
your local CMC sales representative

*#24 all-thread bars are not covered under ASTM A615.

Grades and Specifications

We currently produce all-thread bar to meet the mechanical properties specified in ASTM A615 Grade 80 specifications and is manufactured in lengths up to 70 feet.

Nominal Bar Diameter	Nominal Area Thru Threads	Minimum Ultimate Strength	Minimum Yield Strength	Nominal Weight	Approx. Thread Major Dia.
#8 - 1" (25 mm)	0.79 in ² (510 mm ²)	83 kips (369.2 kN)	63.2 kips (281.1 kN)	2.67 lbs/ft (3.97 Kg/M)	1-1/8" (28.6 mm)
#9 - 1-1/8" (29 mm)	1.00 in ² (645 mm ²)	105 kips (467.1 kN)	80 kips (355.9 kN)	3.4 lbs/ft (5.06 Kg/M)	1-1/4" (31.8 mm)
#10 - 1-1/4" (32 mm)	1.27 in ² (819 mm ²)	133.4 kips (593.2 kN)	101.6 kips (451.9 kN)	4.3 lbs/ft (6.404 Kg/M)	1-3/8" (34.9 mm)
#11 - 1-3/8" (36 mm)	1.56 in ² (1006 mm ²)	163.8 kips (728.6 kN)	124.8 kips (555.1 kN)	5.313 lbs/ft (7.907 Kg/M)	1-1/2" (38.1 mm)
#14 - 1-3/4" (43 mm)	2.25 in ² (1452 mm ²)	236.3 kips (1050.9 kN)	180 kips (800.7 kN)	7.65 lbs/ft (11.38 Kg/M)	1-7/8" (47.6 mm)
#18 - 2-1/4" (57 mm)	4.00 in ² (2581 mm ²)	420 kips (1868.2 kN)	320 kips (1423.4 kN)	13.6 lbs/ft (20.24 Kg/M)	2-7/16" (61.9 mm)
#20 - 2-1/2" (64 mm)	4.91 in ² (3168 mm ²)	515.6 kips (2293.3 kN)	392.8 kips (1747.3 kN)	16.7 lbs/ft (24.8 Kg/M)	2-3/4" (69.9 mm)
#24 - 3" (76 mm) *	7.07 in ² (4534 mm ²)	742.4 kips (3302.1 kN)	565.6 kips (2515.6 kN)	24.0 lbs/ft (35.7 Kg/M)	3-3/16" (81.0 mm)

Corrosion Protection Options

CMC provides the following corrosion protection options that can be applied to our all-thread product range. The level of corrosion protection needed is dependent on several factors including how corrosive or severe the environment is, the required service life of the product and installation needs. Our team can work with you to determine the best fit for your project. Other protection options not produced by CMC include hot-dip galvanizing, and should be produced in accordance with ASTM standards.



Epoxy Coating

Epoxy coated bars and fasteners are produced in accordance with ASTM A775 or ASTM A934. They can be damaged if mishandled, so fasteners are often galvanized to protect against damage in the field. Epoxy coating patch kits are provided for field repairs when surfaces are nicked or scratched.



GalvaBar®

GalvaBar® ASTM 1094 features a thin coating of zinc on the bar, extending the service life of the base steel underneath. Galvanized bars have excellent bond characteristics to grout or concrete, and GalvaBar® may be applied to bars and all accessories.



ChromX®

ChromX® ASTM 1035 is offered in grades 100 and 120 and is an uncoated, high strength, corrosion resistant steel produced by CMC. Depending on corrosiveness of the environment, ChromX® offers two levels of corrosion protection with varying lengths of service life.



it's what's **inside** that counts

We're Commercial Metals Company – CMC, for short. You'll find our steel in sports stadiums and public buildings as well as highways, bridges, railways and other structures nearly everywhere on the planet.

To serve this global market, CMC maintains facilities across the United States, Europe and Asia. These sites include everything from local recycling centers, steel mini-mills and micro-mills to large-scale fabrication centers, heat-treating facilities and other metals-related operations.

RECYCLING | MILLS | FABRICATION cmc.com