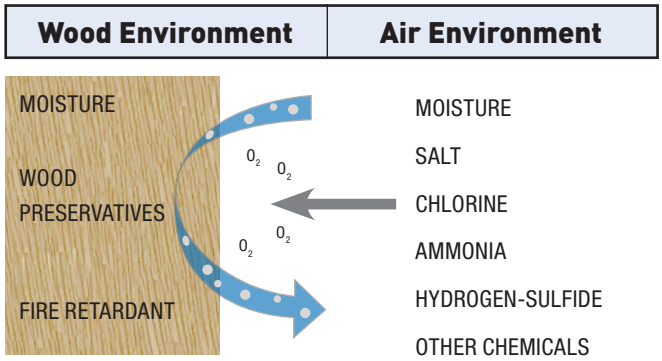
MiTek®

Corrosion Protection

For the majority of applications, metal hangers and connectors are used in interior, above ground, dry service conditions. They are typically not being exposed to corrosive environments which can significantly reduce their strength and longevity.

What is Corrosion?

Corrosion is the destructive degradation of steel due to its interaction with the environment. Here the steel is the connector and the environment is whatever the connector interacts with, namely wood and air. Each environment may contain one or more corrodents (substances that cause corrosion) acting independently or in combination to degrade the strength of the connectors.



Electrochemical oxidation is the most common type of corrosion affecting metal connectors. It is a process in which iron (Fe) reacts with oxygen (O_2) in the presence of an electrolyte such as water (H_2O) to form iron oxide (Fe_2O_3), a brown and flaky by-product commonly known as rust.

$$\text{Iron} + \text{Oxygen} \xrightarrow[\text{(Electrolyte)}]{\text{Water}} \text{Rust}$$

Steel is an iron-based metal alloy which is susceptible to this type of corrosion, even when exposed to normal atmospheric air, since air contains oxygen and water as part of its normal composition. While steel is very strong, rust is not. Over time, the continuous formation of rust eats away the base metal and reduces the strength of the connector. The rate of oxidation generally increases with increasing moisture content, the presence of salt, or when galvanic corrosion is a contributing factor.

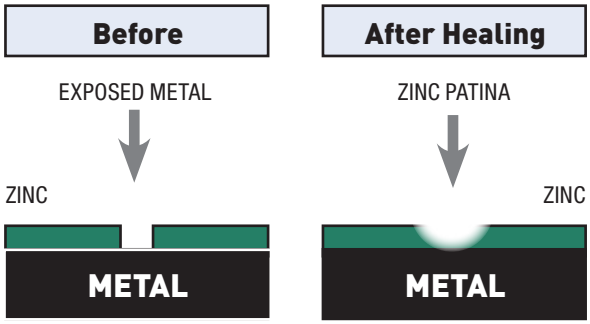
Galvanic Series (Abbreviated)
More Active (Anodic-)
Zinc
Aluminum
Steel
Brass
Copper Nickel
Stainless Steel - Type 304
Stainless Steel - Type 316
More Passive (Cathodic +)

Galvanic corrosion occurs when there is an interaction between dissimilar metals that are in contact with one another. The degree of corrosion depends on where the metals reside in the galvanic series, which is a compilation of known metals and their relative reactivity. The more active metal (anode) will corrode preferentially while shielding the more passive metal (cathode) from further degradation. For example, with galvanized steel, zinc is used as a coating on the steel because it sacrificially corrodes to protect the steel substrate underneath. The coupling between zinc and steel is said to have a lower galvanic potential than the coupling between zinc and stainless steel because zinc and steel are closer to each other in the galvanic series. In general, the coupling with a lower galvanic potential would result in a slower corrosion rate.

Corrosion Protection Options

Zinc Galvanizing:

Most connectors are manufactured from pre-galvanized sheet steel or coiled steel, which is typically made by the hot-dip process in accordance with ASTM-A653 and ASTM-A924 standards. Fasteners are galvanized in accordance with ASTM-A153. In the manufacturing of the connectors, the punching and shearing processes create exposed bare metal surfaces. Thankfully, zinc has an incredible ability to 'heal' itself; the zinc around the exposed metal corrodes and deposits a layer of zinc corrosion by-product called zinc patina (white powdery appearance) over the exposed metal to further protect it.



By being more reactive than steel, zinc sacrificially corrodes at a steady rate over time to shield the steel from the effect of corrosion. The protection ability of zinc is proportional to its thickness, which is proportional to the amount of zinc applied. Zinc coating is specified as the total weight on both sides of the sheet steel, measured in ounces per square foot (oz/ft2). For example, G90 means that there are 0.90 oz/ft2; G185 has 1.85 oz/ft2 and would last about two times longer than G90. G90 is the minimum protection for connectors and is standard in MiTek connectors.

Design Guidelines:

Where there are governing national or local building code requirements, they should be used in the selection of the connectors and their protection against corrosion. In the absence of such requirements, the decision rests on the experience and judgment of the building designer/engineer. Design guidelines are presented in this section to aid the building designer/engineer in this selection process, but it is the responsibility of the building designer/engineer to determine the most viable solution based on an evaluation of the connectors to the specific corrosive environment(s). The guidelines consist of best practices, recommended protection levels for the connectors, and strength modification factors for the lumber/connectors.

Where there are multiple options suggested, do not automatically default to the lowest protection level. The lower protection level is intended to address less severe conditions while the higher protection level is meant to address more severe conditions. Select the option that eliminates or adequately reduces the vulnerability of the connectors to the corrodents. When in doubt, use a higher level of protection than anticipated or seek professional consultation.

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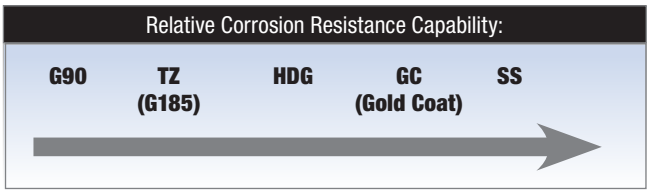
Relative Corrosion Resistance Capability:
The chart below ranks the available options in terms of their relative effectiveness against corrosion. As expected, the ability to resist corrosion increases with increasing zinc thickness, so G185 is the most durable pre-galvanized product available. Gold Coat offers enhanced protection compared to G185 while stainless steel offers the best protection for most applications.



Galvanic Corrosion:
The simplest and most practical solution to minimize galvanic corrosion is to make sure that the components that are in direct contact with each other are made of the same material or coating. Once this is achieved, there is no net galvanic potential between the components and galvanic corrosion is eliminated or significantly reduced. For example, use galvanized nails for galvanized connectors and stainless steel nails for stainless steel connectors.

Wet Service Condition:
For lumber, this refers to any service condition in which the average equilibrium moisture content is 15% or more over a year or may exceed 19% at any time. For lumber to get above 19% moisture, the relative humidity in the air needs to reach above 80%. Unfortunately, this is above the critical humidity level for the electrochemical oxidation of steel, which is around 70%. Beyond 70%, the rate of corrosion in the connectors increases rapidly due to the abundant availability of moisture.

G90 may not be suitable for use in wet service condition.

Preservative (Pressure) Treated Wood:
There are many preservative wood treatment formulations available on the market today. The element that is common to most of them is the presence of copper in the formulation which can contribute to the corrosion of steel connectors and fasteners.

Of the copper based preservatives, the two types are micronized copper and soluble copper. Micronized copper formulations MCA (micronized copper azole) and MCQ (micronized copper quat) are sold under different brand names and are the most predominant formulation in today's preservative treated wood industry. Soluble copper formulations CA (copper azole) and ACQ (alkaline copper quat) have also been very popular since they replaced CCA (chromated copper arsenate) which was phased out in 2004. Some "metal free" preservatives are still used for above ground and sill plate applications, but are not as common. One of the main criterion affecting the selection of one preservative treatment over another is the type of wood being treated and how well it can be penetrated by the treatment.

While many of the advanced wood treatment formulations containing copper used today have proven to be less corrosive to steel, especially micronized copper, MiTek recommends a higher level of corrosion protection for connectors in contact with copper based wood treatments.

Connectors and fasteners in contact with metal free wood preservatives do not require additional corrosion protection due to the preservative itself, however all factors that can create the corrosive environment should be considered when selecting the appropriate finish. If unsure as to whether a particular treatment is corrosive to steel fasteners, check with the supplier of the preservative treated wood product for their recommendation.

Fire Retardant Treated (FRT) Wood:
Although most common FRT products are not corrosive to metal connectors, not all products are non-corrosive. Additionally, they typically require proprietary strength reductions applied to the lumber in accordance with the manufacturer's specifications. Since the lumber strength is lower, the lateral and withdrawal resistance of nails must also be reduced accordingly. It is important to note that some fire retardants cause the wood to absorb more moisture from the air than untreated lumber. Consequently, the connector may be exposed to a higher level of moisture, resulting in more corrosion.

Swimming Pools:
This is one of the most hazardous environments for steel connectors due to continuous exposure to high temperature, high moisture content, and corrosive chemicals such as chlorine, bromine, and other disinfectants. The combination of all these factors can lead to accelerated corrosion and premature structural failure. This environment is so corrosive that all possible preventive measures should be employed to prevent the hanger from being exposed to the pool water. These include the use of a vapor barrier and a ventilation system that does not take the air from the pool environment.

Additionally, it has been known that certain grades of stainless steel (316 and others) are susceptible to a mode of structural failure known as stress corrosion cracking (SCC) when exposed to a swimming pool environment. SCC is usually localized near areas of high residual stress and small cracks can rapidly propagate and cause catastrophic failures. See warning below.

⚠ WARNING

Stainless steel connectors and fasteners shall not be used for metal hangers over swimming pools due to stress corrosion cracking. SCC has been known to occur under the following conditions:

- Use of certain grades of stainless steel (grades 316 and others).
- Structural members subjected to high tensile stress.
- Presence of certain chemicals, including chlorine and bromine.

Gold Coat may be the best choice in this environment.

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The **Structural Connectors Coating Recommendations** chart below was developed by reviewing field service performance and accelerated corrosion test results. They are offered as general guidelines and are not intended to cover all possible service conditions. Additional consideration may also be needed for:

wet service conditions
preservation treated lumber
fire retardant treated lumber
strength reducing chemicals
building near salt water coastal areas

Additionally, the **Corrosion Protection Guidelines** to the right may also be used to assist in making the proper choice of corrosion protection.

The building designer/engineer has the ultimate responsibility of selecting the most viable protective coating based on knowledge of project specific corrosive environments and local building code requirements.

Corrosion Protection Guidelines:

- MiTek recommends stainless steel connectors for the highest level of corrosion protection. As an economical alternative to stainless steel our new Gold Coat connectors are specifically designed for exterior application when in contact with preservative treated wood.
- For connectors in contact with preservative treated wood, the Triple Zinc option provides the minimum G-185 coating thickness required by code and is an economical alternative for exterior applications.
- The use of correct fastener with the connector is critical. Stainless steel connectors require stainless steel fasteners. For exterior applications, hot-dip galvanized fasteners (HDG) or exterior coat (EXT) must be used with both Triple Zinc and hot-dip galvanized finishes. Gold Coat connectors require gold coat or hot-dip galvanized fasteners.
- MiTek's zinc dichromate WS Structural Wood Screws are not recommended for use with preservative or fire-retardant treated wood. Some structural wood screws are available in Gold Coat or exterior coat.
- MiTek clearly differentiates standard interior G90 connectors from the corrosion resistant connectors. Gold Coat connectors are distinguishable from other connectors due to their gold color.

Structural Connectors Coating Recommendations

AWPA[9] Use Category	Service Conditions	Use Environment	Example Applications	Preservatives and Retentions[6,7,10]	Minimum Coating Requirements[1,2,3,4]
UC1 Interior/Dry	Interior construction, Above ground, Dry	Continuously protected from weather or other sources of moisture	General framing, interior construction	Untreated	G90
UC2 Interior/Damp	Interior construction, Above ground, Damp	Protected from weather, but may be subject to sources of moisture	Sill plates	SBX-DOT, Organic	G90
				ACQ-D (0.15), CA-B (0.10), CA-C (0.06), MCQ (0.06), µCA-C (0.05)	Triple Zinc (G-185)[8,9], HDG (post hot dipped), Exterior Coat[12]
UC3A Above Ground Protected	Exterior construction, Above ground, Rapid water runoff	Exposed to all weather cycles, not exposed to prolonged wetting	Exposed exterior beams or columns in an open, covered structure	ACQ-D (0.25), MCQ (0.15), CA-B (0.10), CA-C (0.06), µCA-C (0.05), Organic	Triple Zinc (G-185), HDG (post hot dipped), Exterior Coat[12] or MiTek Gold Coat
UC3B Above Ground Exposed	Exterior construction, Above ground, Poor water runoff	Exposed to all weather cycles, including prolonged wetting	Deck beams and joists	ACQ-D (0.25), MCQ (0.15), CA-B (0.10), CA-C (0.06), µCA-C (0.05), Organic	Triple Zinc (G-185), HDG (post hot dipped), or MiTek Gold Coat
UC4A Ground Contact General Use	Ground contact, Fresh water; includes above ground applications	Ground contact or fresh water exposed to all weather cycles, Normal exposure	Deck posts, beams and joists. Fresh water docks[11]	ACQ-D (0.40), MCQ (0.23), CA-B (0.21), CA-C (0.15), µCA-C (0.14)	Triple Zinc (G-185), HDG (post hot dipped), or MiTek Gold Coat[5]
UC4B Ground Contact Heavy Duty	Exterior construction, Ground contact, Critical components	Ground contact, fresh/salt water water splash exposed to all weather cycles	Permanent wood foundations, critical structural members	ACQ-D (0.60), MCQ (0.23), CA-B (0.31), CA-C (0.25), µCA-C (0.23)	Stainless Steel

1) G90 and G-185 refer to galvanization requirements for ASTM A653 material.
2) Connectors galvanized to ASTM A123 may be used in place of either G90 or G185 coatings.
3) Other coating may be suitable for a given environment if the conditions are known and predictable.
4) For G185 connectors use fasteners galvanized per ASTM A153. For Gold Coat connectors, use Gold Coat fasteners and for stainless steel connectors, use stainless steel fasteners.
5) If the enviroment has the potential to contain elements which may make it more corrosive, the use of stainless steel is recommended.
6) MCQ is a micronized copper treatment such as *Micro Pro* by Koppers. µCA-C is a dispersed copper treatment manufactured by Arch Treatment Technologies. Organic preservatives include L^3 from Arch Treatment Technologies and EcoLife II from Viance, LLC.
7) For wood treatments not shown, contact MiTek or the wood preservative manufacturer for recommended coatings.
8) Testing by MiTek has found that in interior applications where the treated wood will remain relatively dry during its service life the use of G90 connectors with MCQ or µCA-C treated wood is appropriate.
9) American Wood Protection Assocation Standard U1-16.
10) SBX/DOT= Sodium Borate; ACQ-D = Alkaline Copper Quat Type D; CA-B = Copper Azole Type B; CA-C = Copper Azole Type C; MCQ = Micronized Copper Quat; µCA-C = Dispersed Copper Azole Type C. The number listed in the parenthesis is the required retention level in pounds per cubic foot, or PCF.
11) Deck joists and beams must be treated to Use Category UCA4 when they are difficult to maintain, repair or replace and are critical to the performance and safety of the deck.
12) Users must perform periodic inspection and provide regular maintenance to ensure the satisfactory performance of the structure.

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Corrosion Resistant Finishes

MiTek offers several corrosion resistant finishes to cover a range of corrosion performance.

Corrosion Protection Level	Finish / Material	Description	Required Fastener	Ordering
CONNECTORS				
	Primer	Primer paint is used to protect steel during shipping and installation but is not considered a corrosion protection method when installed in corrosive environments.	Bright fasteners	Stock number as listed in the chart
	G90 Galvanizing	Galvanizing provides a prefabrication coating of 0.90 ounces of zinc per square foot of surface area (both sides) measured in accordance with ASTM A 653.	Bright fasteners	Stock number as listed in the chart
	Triple Zinc (TZ) (G-185 Galvanizing)	TZ galvanizing provides a prefabrication coating of 1.85 (G-185) ounces of zinc per square foot of surface area (both sides) measured in accordance with ASTM A 653.	Hot-dip galvanized or Exterior Coat fasteners	To order, add TZ to stock number, as in C44-TZ
	Hot-Dip Galvanized (HDG)	HDG coating provides an after-fabrication hot-dipped zinc coating. The coating thickness is dependent on the connector material, but generally ranges from 1.2 to 2.3 ounces of zinc per square foot of surface area (both sides). Hot-dip products meet requirements set forth in ASTM A 123.	Hot-dip galvanized or Exterior Coat fasteners	To order, add HDG to stock number, as in KCC44-HDG
	Gold Coat (GC)	Gold Coat is a proprietary multi-layer protection system. It is comprised of a top coat barrier layer and a zinc layer placed over a steel substrate.	Gold Coat or Hot-dip galvanized fasteners	To order, add GC to stock number, as in AC7-GC
	Stainless Steel (SS)	Best option for corrosion protection. Quality stainless steel (316SS grade steel) is used to fabricate connectors. Although costs are higher, some applications may need the virtual corrosion proof quality of stainless steel.	Stainless Steel fasteners	To order, add SS to stock number, as in PBES44-SS
FASTENERS				
	Yellow Zinc	Zinc yellow chromate finish		Stock number as listed in the chart
	Hot-Dip Galvanized (HDG)	HDG coating provides an after-fabrication hot-dipped zinc coating. The coating thickness is dependent on the connector material, but generally ranges from 1.2 to 2.3 ounces of zinc per square foot of surface area (both sides). Hot-dip products meet requirements set forth in ASTM A 123.		Stock number as listed in the chart
	Exterior Coat (EXT)	EXT finish is a double barrier coating over zinc.		Stock number as listed in the chart
	Gold Coat (GC)	Gold Coat is a proprietary multi-layer protection system. It is comprised of a top coat barrier layer and a zinc layer placed over a steel substrate.		Stock number as listed in the chart
	Stainless Steel (SS)	Best option for corrosion protection.		Stock number as listed in the chart

DISCLAIMER – The general information and guidelines provided in this MiTek Product Catalog shall not be used as a substitute for competent professional examination and verification. It is the responsibility of the building designer/engineer to determine the applicability and suitability of the information provided. Anyone making use of this information assumes all responsibility and liability arising from such use.

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Corrosion Resistant Product Offering

MiTek USP Stock No.	Triple Zinc G-185 (TZ)	Hot-Dip Galv. (HDG)	Exterior Coat (EXT)	Gold Coat (GC)	Stainless Steel(SS)
Fasteners / Anchors					
AB1212-HDG					
AB126-HDG					
AB128-HDG					
AB5812-HDG					
BP12					
BP583					
HBPS12					
HBPS58					
LBP12-TZ					
LBP58-TZ					
LBPS12-TZ					
LBPS58-TZ					
LL915					
LL930					
N10C					
N10-GC					
N16C					
N8-GC					
NA11					
NA16D					
NA20D					
NA9D					
NA8DHDGPT (USA ONLY)					
N8CHDGPT (USA ONLY)					
NA10DHDGPT (USA ONLY)					
N10CHDGPT (USA ONLY)					
NA16DHDGPT (USA ONLY)					
SSN10C					
SSN16C					
SSN8C					
SSNA10D					
SSNA8D					
THR1218-HDG					
THR1224-HDG					
THR1236-HDG					
THR125-HDG					
THR126-HDG					
THR128-HDG					
THR5812-HDG					
THR5816-HDG					
THR588-HDG					
WS15					
WS2 (USA ONLY)					
WS25 (USA ONLY)					
WS3					
WS35 (USA ONLY)					
WS45					
WS5					
WS6					
WS8					
WSBH25-EXT (USA ONLY)					
WSBH4-EXT (USA ONLY)					
WSBH6-EXT (USA ONLY)					
WSBH8-EXT (USA ONLY)					
WSBH10-EXT (USA ONLY)					
WSWH278 (USA ONLY)					
WSWH358-EXT (USA ONLY)					
WSWH45 (USA ONLY)					
WSWH5 (USA ONLY)					
WSWH6 (USA ONLY)					
WSWH8-EXT (USA ONLY)					
Holdowns / Foundation Anchors					
FA3					
FA4					
FWAN-TZ					
LTS19-TZ					
PA18					
PA23					
PA28					
RP6					
ST1-TZ					
ST2-TZ					
STB16					
STB20					
STB28					
STB34					

MiTek USP Stock No.	Triple Zinc G-185 (TZ)	Hot-Dip Galv. (HDG)	Gold Coat (GC)	Stainless Steel (SS)
Holdowns / Foundation Anchors				
STB36 (USA ONLY)				
STBL24				
TA51 (USA ONLY)				
TA71 (USA ONLY)				
TDL5				
TDX2-TZ				
Column / Post Caps				
BC400-TZ				
BCS22-4				
BCS23-6				
C44				
C46				
C46R				
C66				
C66R				
EPCM4416				
EPCM4616				
EPCM6616				
EPCM66				
KCC325-4 (USA ONLY)				
KCC325-6 (USA ONLY)				
KCC44 (USA ONLY)				
KCC46 (USA ONLY)				
KCC48 (USA ONLY)				
KCC525-4 (USA ONLY)				
KCC525-6 (USA ONLY)				
KCC64 (USA ONLY)				
KCC66 (USA ONLY)				
KCC68 (USA ONLY)				
KCC88 (USA ONLY)				
KCCQ325-4				
KCCQ325-6				
KCCQ44				
KCCQ46				
KCCQ48 (USA ONLY)				
KCCQ525-4				
KCCQ525-6				
KCCQ525-8 (USA ONLY)				
KCCQ64				
KCCQ66				
KCCQ71-4 (USA ONLY)				
KCCQ71-6 (USA ONLY)				
KCCQ74 (USA ONLY)				
KCCQ76 (USA ONLY)				
KECC325-4 (USA ONLY)				
KECC325-6 (USA ONLY)				
KECC44 (USA ONLY)				
KECC46 (USA ONLY)				
KECC525-4 (USA ONLY)				
KECC525-6 (USA ONLY)				
KECC64 (USA ONLY)				
KECC66 (USA ONLY)				
KECC68 (USA ONLY)				
KECC88 (USA ONLY)				
KECCQ325-4 (USA ONLY)				
KECCQ325-6 (USA ONLY)				
KECCQ44				
KECCQ46				
KECCQ48 (USA ONLY)				
KECCQ525-4 (USA ONLY)				
KECCQ525-6				
KECCQ525-8 (USA ONLY)				
KECCQ64				
KECCQ66				
KECCQ71-4 (USA ONLY)				
KECCQ71-6 (USA ONLY)				
KECCQ74 (USA ONLY)				
KECCQ76 (USA ONLY)				
PB44-6TZ				
PB66-6TZ				
PBC44-TZ				
PBC66-TZ				
PBES44				
PBES66				
PBS44				
PBS66				

MiTek USP Stock No.	Triple Zinc G-185 (TZ)	Hot-Dip Galv. (HDG)	Gold Coat (GC)	Stainless Steel (SS)
Column / Post Caps				
PBS66R				
PCM44				
PCM4416				
PCM46				
PCM4616				
PCM4816				
PCM66				
PCM6616				
Column / Post Bases				
APB44 (CANADA ONLY)				
APB66 (CANADA ONLY)				
CBSQ44-TZ				
CBSQ46-TZ				
CBSQ66-TZ				
D44-TZ				
D46				
D46R-TZ				
D66				
D66R				
EBG44-TZ				
EBP44T-TZ (USA ONLY)				
EPB4408				
EPB4608				
EPB6608				
EPBH44				
EPBH46R				
EPBH66				
EPBH66R				
EPBH88 (CANADA ONLY)				
KCB44				
KCB46				
KCB48				
KCB66				
KCB68				
KCB88				
KCB1010				
KCB1212				
KCBQ44				
KCBQ46				
KCBQ66				
KCBQ88				
PA44E				
PA44				
PA46E				
PA46				
PA55R-TZ (USA ONLY)				
PA66E				
PA66ER-TZ				
PA66R				
PA66				
PAU44				
PAU46				
PAU66				
PAU66R-TZ (USA ONLY)				
PAU88				
PAU1010				
PAU1010R				
PAU1212				
PAU1212R				
RPB-TZ				
RSCH44 (CANADA ONLY)				
RSCH46 (CANADA ONLY)				
WAS44				
WAS46				
WAS66				
WE44				
WE46				
WE66				
Framing Plates & Angles				
A3				
AC5				
AC7				
AC9				
ANJ44S-HDG				
JA1				
KHL33				

USA ONLY Only available in USA

Only available in Canada

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Framing Plates & Angles				
KHL35		■		
KHL37		■		
KHL43		■		
KHL46		■		
KHL55		■		
KHL57		■		
KHL76		■		
ML24-TZ	■			■
ML26-TZ	■			■
MP3	■			
MP34	■			■
MP4F	■			
MP5	■			■
MP6F				■
MP7	■		■	■
MP9	■		■	
MPA1	■		■	■
Stud Plate Ties				
RSPT6	■			
RSPT6-2	■			
SPT22	■			
SPT24	■			
SPT4	■			
SPT6	■			
SPT8	■			
SPTH4	■			
SPTH6	■			
SPTH8	■			
TSP	■			
Lateral Joist Connectors				
LJC-TZ	■			
LJQ15-TZ	■			
LJQ17-TZ	■			
LJQ20-TZ	■			
LJQ23-TZ	■			
LJQ25-TZ	■			
LJQ35-TZ	■			
Twist Straps				
HTW20	■			
LTW12				■
LTW18				■
MTW12	■			
MTW16	■			
MTW20	■			■
MTW30	■			
Straps				
HRS416-TZ	■			
HTP37-TZ	■			
KHST2 USA ONLY		■		
KHST3 USA ONLY		■		
KRPS22	■			
KRPS28	■			
KST227		■		
KST237		■		
KST248		■		
KST260		■		
L6	■			
LH12		■		
LSTA36				■
MSTA12	■			■
MSTA15	■			
MSTA18	■			■
MSTA21	■			
MSTA24	■			■
MSTA30	■			
MSTA36	■			■
MSTA9	■			
MSTAM24	■			
MSTAM36	■			
PS218-HDG USA ONLY		■		
PS418-HDG USA ONLY		■		
PS720-HDG USA ONLY		■		
RS150	■			■
RS16-R USA ONLY				■
T6	■			

MiTek USP Stock No.	Triple Zinc G-185 (TZ)	Hot-Dip Galv. (HDG)	Gold Coat(GC)	Stainless Steel (SS)
Straps				
TH12-HDG		■		
Hangers				
HD210-2IF	■	■		■
HD210-3IF	■	■		
HD28-2IF	■			
HD410	■			
HD410IF	■			
HD412	■			
HD412IF	■			
HD44IF	■			
HD46	■			
HD46IF	■			
HD48	■			
HD48IF	■			
HD610	■			
HD610IF	■			
HD612	■			
HD612IF	■			
HD68	■			
HD68IF	■			
HDQ210-2IF USA ONLY				■
HDQ210-3IF USA ONLY				■
HDQ310IF USA ONLY				■
HDQ410IF USA ONLY				■
HDQ412IF USA ONLY				■
HDQ610IF	■			■
HDQ612IF	■			■
HUS210	■			
HUS210-2IF	■			
HUS212-2				■
HUS26	■			
HUS28	■			
HUS28-2IF	■			
JL210IF-TZ	■			■
JL24IF-TZ	■			
JL26IF-TZ	■			■
JL28IF-TZ	■			
JPF24	■			
JPF26	■			
JUS210	■		■	■
JUS210-2	■		■	■
JUS210-3	■			■
JUS24	■		■	■
JUS24-2	■			
JUS26	■		■	■
JUS26-2	■		■	■
JUS28	■		■	■
JUS28-2	■			■
JUS28-3	■			
JUS36	■			
JUS410	■			
JUS44	■			
JUS46	■			
JUS48	■			
KLB210 USA ONLY	■			
KLB212 USA ONLY	■			
LSSH15-TZ	■			■
LSSH210-TZ	■			■
LSSH179-TZ	■			
LSSH20-TZ	■			
LSSH23-TZ	■			
LSSH25-TZ	■			
LSSH26-TZ	■			
LSSH31-TZ	■			
LSSH35-TZ	■			
MSH422	■			
SKH210L	■		■	■
SKH210L-2	■			
SKH210R	■		■	■
SKH210R-2	■			
SKH26L	■		■	■
SKH26R	■		■	■
SKH28L	■			
SKH28R	■			
SKHH210L-2	■			

MiTek USP Stock No.	Triple Zinc G-185 (TZ)	Hot-Dip Galv. (HDG)	Gold Coat (GC)	Stainless Steel (SS)
Hangers				
SKHH210L-2IF	■			
SKHH210R-2	■			
SKHH210R-2IF	■			
SKHH410L	■			
SKHH410LIF	■			
SKHH410R	■			
SKHH410RIF	■			
SKHH414LIF	■			
SKHH414RIF	■			
SKHH46L	■			
SKHH46LIF	■			
SKHH46R	■			
SKHH46RIF	■			
SUH210 USA ONLY	■			
SUH210-2 USA ONLY		■		
SUH210-3 USA ONLY		■		
THD28-2	■			
THD410	■			
THD46	■			
THD48	■			
THDH412	■			
THDH610 USA ONLY	■			
Rafter Ties				
HHCP2	■			
HHCP4-TZ	■			
LFTA6	■			
RT10	■			■
RT15	■		■	
RT16-2	■			■
RT16A	■			■
RT20	■			
RT3A	■			■
RT4	■			■
RT5	■			■
RT7	■			■
RT7A	■		■	■
RT8A	■			■
Embedded Truss Anchors				
HTA20 USA ONLY	■			■
Deck & Fences				
ADTT-TZ	■			
CSH-TZ	■			
DC50-TZ	■			
DTB-TZ	■			■
ERB24-TZ	■			
FB14-TZ	■			
FB23-TZ	■			
FB24-TZ	■			
FB26-TZ	■			
FPH24-TZ 🍁	■			
FRB24-TZ	■			
PRT15-TZ	■			
PRT2H-TZ	■			
PRT2-TZ USA ONLY	■			
PRTIC2-TZ	■			
SCA10-TZ	■			■
SCA9-TZ	■		■	
SDJT14-TZ	■			
SDPT5-TZ	■			
SDPT7-TZ	■			
General Hardware				
ICPL516-TZ	■			
ICPL58	■			
TTA12-TZ	■			
TTA2-TZ	■			
TTB22-TZ	■			
TTC24-TZ	■			
TTC42-TZ	■			
TTF22-TZ	■			
TTR-TZ	■			
TTU2-TZ	■			
WT22	■			■
WT22B-HDG 🍁		■		

USA ONLY Only available in USA

🍁 Only available in Canada

Customer Service & Technical Assistance

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MiTek-US.com