

ZINCALUME® Steel Grade 33 Grade Data Sheet

General Description

ZINCALUME® Steel Grade 33 - hot-dip zinc/aluminum alloy-coated structural steel with a spangled surface and guaranteed minimum yield strength of 33 ksi with good ductility.

Typical Uses

Roll-formed roofing and siding.

Dimensions				
Typical Thickness (Inches)	Maximum .035"	Typical width	Maximum 48.9"	
	Minimum .013"		Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	33	40-56	Carbon (C)	0.20
Tensile strength, ksi	45	53-64	Phosphorus (P)	0.04
Elongation in 2 inch, minimum %	20	25-35	Manganese (Mn)	1.15
Hardness, HRB		50-70	Sulfur (S)	0.04
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	5
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
			Roll-forming	5
Chemical treatment	Passivated		Welding *	5
			Painting **	5
ZINCALUME® Plus	Resin Coated			
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0329"

ZINCALUME® Steel Grade 37 Grade Data Sheet

General Description

ZINCALUME® Steel Grade 37 - hot-dip zinc/aluminum alloy-coated structural steel with a spangled surface and guaranteed minimum yield strength of 37 ksi with good ductility.

Typical Uses

Roll-formed roofing and siding.

Dimensions				
Typical Thickness (Inches)	Maximum .035"	Typical width	Maximum 48.9"	
	Minimum .013"		Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	37	39-59	Carbon (C)	0.20
Tensile strength, ksi	52	54-67	Phosphorus (P)	0.04
Elongation in 2 inch, minimum %	18	20-40	Manganese (Mn)	1.15
Hardness, HRB		50-70	Sulfur (S)	0.04
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	5
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
Chemical treatment	Passivated		Roll-forming	5
			Welding *	5
			Painting **	5
ZINCALUME® Plus	Resin Coated			
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0329"

ZINCALUME® Steel Grade 40 Grade Data Sheet

General Description

ZINCALUME® Steel Grade 40 - hot-dip zinc/aluminum alloy-coated structural steel with a spangled surface and guaranteed minimum yield strength of 40 ksi with good ductility.

Typical Uses

Roll-formed roofing and siding.

Dimensions				
Typical Thickness (Inches)	Maximum .035"	Typical width	Maximum 48.9"	
	Minimum .013"		Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	40	44-55	Carbon (C)	0.20
Tensile strength, ksi	55	55-68	Phosphorus (P)	0.04
Elongation in 2 inch, minimum %	16	26-35	Manganese (Mn)	1.15
Hardness, HRB		50-70	Sulfur (S)	0.04
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	5
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
			Roll-forming	5
Chemical treatment	Passivated		Welding *	5
			Painting **	5
ZINCALUME® Plus	Resin Coated			
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0329"



ZINCALUME® Steel Grade 50 (Class 1) Grade Data Sheet

General Description

ZINCALUME® Steel Grade 50 (Class 1) - hot-dip zinc/aluminum alloy-coated structural steel with a spangled surface and guaranteed minimum yield strength of 50 ksi with good ductility.

Typical Uses

Roll-formed roofing and siding.

Dimensions				
Typical Thickness (Inches)	Maximum .0296" Minimum .018"	Typical width	Maximum 48.9" Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	50	50-65	Carbon (C)	0.20
Tensile strength, ksi	65	65-75	Phosphorus (P)	0.04
Elongation in 2 inch, minimum %	12	24-34	Manganese (Mn)	1.15
Hardness, HRB		60-75	Sulfur (S)	0.04
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	3
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
Chemical treatment	Passivated		Roll-forming	5
			Welding *	5
			Painting **	5
ZINCALUME® Plus	Resin Coated			
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0228"

ZINCALUME® Steel Grade 50 (Class 2) Grade Data Sheet

General Description

ZINCALUME® Steel Grade 50 (Class II) - hot-dip zinc/aluminum alloy-coated structural steel with a spangled surface and guaranteed minimum yield strength of 50 ksi with good ductility.

Typical Uses

Roll-formed roofing and siding.

Dimensions				
Typical Thickness (Inches)	Maximum .0228" Minimum .019"	Typical width	Maximum 48.9" Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	50	50-65	Carbon (C)	0.40
Tensile strength, ksi	-	65-75	Phosphorus (P)	0.20
Elongation in 2 inch, minimum %	12	24-34	Manganese (Mn)	1.15
Hardness, HRB		65-80	Sulfur (S)	0.04
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	3
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
Chemical treatment	Passivated		Roll-forming	5
			Welding *	5
			Painting **	5
ZINCALUME® Plus	Resin Coated			
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0228"



ZINCALUME® Steel Grade 80 (Class 1) Grade Data Sheet

General Description

ZINCALUME® Steel Grade 80 - hot-dip zinc/aluminum alloy-coated structural steel with a spangled surface and guaranteed minimum yield strength of 80 ksi with good ductility.

Typical Uses

Roll-formed roofing and siding.

Dimensions				
Typical Thickness (Inches)	Maximum .0236" Minimum .012"	Typical width	Maximum 48.9" Minimum 28"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	80	80-120	Carbon (C)	0.20
Tensile strength, ksi	82	90-120	Phosphorus (P)	0.04
Elongation in 2 inch, minimum %	-	0-10	Manganese (Mn)	1.15
Hardness, HRB		84-99	Sulfur (S)	0.04
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	2
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
Chemical treatment	Passivated		Roll-forming	4
			Welding *	5
			Painting **	5
ZINCALUME® Plus	Resin Coated			
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0239"

ZINCALUME® Steel Grade CS (Type A) Grade Data Sheet

General Description

ZINCALUME® Steel Grade CS (Type A) - hot-dip zinc/aluminum alloy-coated profiling steel with a spangled surface and with good ductility. Suitable for bending and moderate forming.

Typical Uses

Roll-formed roofing, rainwater goods and general manufacturing.

Dimensions				
Typical Thickness (Inches)	Maximum .035"	Typical width	Maximum 48.9"	
	Minimum .013"		Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	-	40-60	Carbon (C)	0.20
Tensile strength, ksi	-	50-70	Phosphorus (P)	0.04
Elongation in 2 inch, minimum %	-	20-45	Manganese (Mn)	1.15
Hardness, HRB	-	50-70	Sulfur (S)	0.035
Longitudinal tensile	-	0t		
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	2
Tension leveling	Leveled		Drawing	NR
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	NR
			Pittsburgh Lock Seam	NR
Chemical treatment	Passivated		Roll-forming	4
			Welding *	5
ZINCALUME® Plus	Resin Coated		Painting **	5
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0329"

ZINCALUME® Steel Grade CS (Type B) Grade Data Sheet

General Description

ZINCALUME® Steel Grade CS (Type B) - hot-dip zinc/aluminum alloy-coated profiling steel with a spangled surface and with good ductility. Suitable for bending and moderate forming.

Typical Uses

Roll-formed roofing, rainwater goods and general manufacturing.

Dimensions				
Typical Thickness (Inches)	Maximum .035"	Typical width	Maximum 48.9"	
	Minimum .013"		Minimum 26"	
Maximum and minimum thicknesses outside the typical range stated above may be supplied on an inquiry basis only.				
Mechanical Properties			Chemical Composition	
Steel base	Guaranteed Minimum	Typical	Maximum Percent by Weight	
Longitudinal tensile				
Yield strength, ksi	-	40-60	Carbon (C)	0.02-0.15
Tensile strength, ksi	-	50-70	Phosphorus (P)	0.03
Elongation in 2 inch, minimum %	-	20-45	Manganese (Mn)	0.60
Hardness, HRB	-	50-70	Sulfur (S)	0.035
Longitudinal tensile	-	0t		
Supply Condition	Standard	Optional	Fabricating Performance (1-Limited to 5-Excellent, NR-Not Recommended)	
Coating class	AZ50	AZ55	Bending	5
Tension leveling	Leveled		Drawing	2
Surface conditioning	Not Skin-passed	Skin passed, (paint line feed)	Pressing	2
			Pittsburgh Lock Seam	5
Chemical treatment	Passivated		Roll-forming	5
			Welding *	5
ZINCALUME® Plus	Resin Coated		Painting **	5
Oiling	Not Oiled	Oiled		
Branding	Not Branded			

Optional supply conditions and coating classes may be subject to dimensional restriction.

* Design must allow for some strength reduction near welds.

** Maximum thickness suitable for organic coil coating is 0.0329"