

CLASSIFICATION: 05 31 00

PRODUCT DESCRIPTION: ASC Steel Deck decking profiles (all) - Structural steel deck is used in roof and floor applications. Steel Deck is available in a variety of depths, widths and rib-spacings based on customer requirements. Product options include the application of a primer for field paint application ease. Product accessories include the use of insulation batts in cellular deck to improve acoustical performance. This HPD covers the assessment of the following ASC Steel Deck products: 1 1/2" Type B Deck\*, 3" Type N Deck\*, 2" Type 2W Deck\*, 3" Type 3W Deck\*, 7/8" Roof and Form Deck\*, and 4 1/2", 6", 7 1/2" Deep Deck\*. \*Applies to cellular and Acustadek® (welded and riveted) version of product and offered in 18-22 gauge.

Section 1: Summary

Nested Method / Material Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold Disclosed Per

- Material
- Product

Threshold level

- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

Residuals/Impurities

Residuals/Impurities Considered in 2 of 2 Materials

Explanation(s) provided for Residuals/Impurities?  
 Yes  No

All Substances Above the Threshold Indicated Are:

Characterized  Yes Ex/SC  Yes  No  
% weight and role provided for all substances.

Screened  Yes Ex/SC  Yes  No  
All substances screened using Priority Hazard Lists with results disclosed.

Identified  Yes Ex/SC  Yes  No  
All substances disclosed by Name (Specific or Generic) and Identifier.

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

**MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY**  
**GREENSCREEN SCORE | HAZARD TYPE**

**BASE STEEL** [ **IRON** LT-P1 | END **MANGANESE** LT-P1 | END | MUL | REP **CARBON** LT-UNK **PHOSPHORUS** BM-2 | PHY | MAM **ALUMINUM** LT-P1 | RES | PHY | END **SULFUR** LT-UNK | SKI **SILICON** LT-UNK **NICKEL** LT-1 | RES | CAN | SKI | MAM | MUL **CHROMIUM** LT-P1 | RES | END | SKI ] **ZINC METALLIC COATING** [ **ZINC** LT-P1 | AQU | PHY | END | MUL **ALUMINUM** LT-P1 | RES | PHY | END **IRON** LT-P1 | END ]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

All residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

VOC emissions: CDPH Standard Method V1.2 (Section 1350/CHPS) - Not Applicable

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
- No

PREPARER: Self-Prepared  
VERIFIER: SCS Global Services  
VERIFICATION #: qGE-2479

SCREENING DATE: 2019-04-04  
PUBLISHED DATE: 2020-05-15  
EXPIRY DATE: 2022-04-04



## Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-1-standard](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

### BASE STEEL

%: 95.65 - 99.16

MATERIAL THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities were considered based on direct testing conducted by steel suppliers via atomic absorption. Per best practice guidelines residuals and impurities above the reporting threshold of 100ppm with a GS score of BM-1, LT-1, LT-P1 or NoGS have been reported in the content inventory. Other residuals and impurities that might be present above the 100ppm are Copper (0.1540% max), Molybdenum (0.0500% max), Tin (0.0500% max) and Titanium (0.0100%max). Vanadium and/or Columbium may be present as residuals in steel below the inventory reporting threshold of 100ppm.

OTHER MATERIAL NOTES: The weight contribution of the base steel will vary depending on the thickness of the steel and they weight of the zinc metallic coating. See Section 5 for additional details.

### IRON

ID: 7439-89-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-04

%: 98.14 - 99.83

GS: LT-P1

RC: UNK

NANO: No

ROLE: Physical Structure

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

### MANGANESE

ID: 7439-96-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-04

%: 0.15 - 1.20

GS: LT-P1

RC: UNK

NANO: No

ROLE: Physical Structure

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

REPRODUCTIVE

Japan - GHS

Toxic to reproduction - Category 1B

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

**CARBON**

ID: 7440-44-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-04-04**%: **0.02 - 0.24**GS: **LT-UNK**RC: **UNK**NANO: **No**ROLE: **Physical Structure**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

**PHOSPHORUS**

ID: 7723-14-0

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-04-04**%: **0.00 - 0.03**GS: **BM-2**RC: **UNK**NANO: **No**ROLE: **Physical Structure**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H228 - Flammable solid

MAMMALIAN

US EPA - EPCRA Extremely Hazardous Substances

Extremely Hazardous Substances

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades. Priority List of Hazardous Substances (rank 19)

**ALUMINUM**

ID: 7429-90-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-04-04**%: **0.00 - 0.10**GS: **LT-P1**RC: **UNK**NANO: **No**ROLE: **Physical Structure**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H228 - Flammable solid

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H250 - Catches fire spontaneously if exposed to air

PHYSICAL HAZARD (REACTIVE)

EU - GHS (H-Statements)

H261 - In contact with water releases flammable gases

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades. The Priority List of Hazardous Substances (rank 179)

**SULFUR**

ID: 7704-34-9

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2019-04-04**

#: 0.00 - 0.04

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Physical Structure

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

SKIN IRRITATION

EU - GHS (H-Statements)

H315 - Causes skin irritation

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

**SILICON**

ID: 7440-21-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-04

#: 0.00 - 0.25

GS: LT-UNK

RC: UNK

NANO: No

ROLE: Physical Structure

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

**NICKEL**

ID: 7440-02-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-04-04

#: Impurity/Residual

GS: LT-1

RC: UNK

NANO: No

ROLE: Impurity/Residual

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

CANCER

IARC

Group 1 - Agent is Carcinogenic to humans

CANCER

IARC

Group 2b - Possibly carcinogenic to humans

CANCER

CA EPA - Prop 65

Carcinogen

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

US NIH - Report on Carcinogens

Known to be a human Carcinogen

CANCER

US NIH - Report on Carcinogens

Reasonably Anticipated to be Human Carcinogen

SKIN SENSITIZE

EU - GHS (H-Statements)

H317 - May cause an allergic skin reaction

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

ORGAN TOXICANT

EU - GHS (H-Statements)

H372 - Causes damage to organs through prolonged or repeated exposure

MULTIPLE

German FEA - Substances Hazardous to Waters

Class 2 - Hazard to Waters

CANCER

MAK

Carcinogen Group 1 - Substances that cause cancer in man

RESPIRATORY

MAK

Sensitizing Substance Sah - Danger of airway & skin sensitization

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

## CHROMIUM

ID: 7440-47-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-04-04**

#: **Impurity/Residual** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Impurity/Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: Percentage is a range due to variations between specified steel chemistries and grades.

## ZINC METALLIC COATING

#: **0.84 - 4.35**

MATERIAL THRESHOLD: **100 ppm**

RESIDUALS AND IMPURITIES CONSIDERED: **Yes**

RESIDUALS AND IMPURITIES NOTES: **All residuals and impurities were considered under the preparation of this HPD. This was accomplished by obtaining full formulation disclosure, including residuals and impurities, down to the 100 ppm threshold.**

OTHER MATERIAL NOTES: **Zinc alloy applied by the hot dip galvanization process per the latest version of ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process. The weight contribution of the zinc metallic coating will vary depending on thickness of the base steel and the coating weight of zinc applied. See Section 5 for additional details.**

## ZINC

ID: 7440-66-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-04-04**

#: **99.20 - 99.50** GS: **LT-P1** RC: **UNK** NANO: **No** ROLE: **Corrosion Protection**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H260 - In contact with water releases flammable gases which may ignite spontaneously
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters

SUBSTANCE NOTES: **Priority List of Hazardous Substances (rank 75).**

**ALUMINUM**

ID: 7429-90-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-04-04**

#: **0.10 - 0.50**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Adhesion Promoter**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
RESPIRATORY	AOEC - Asthmagens	Asthmagen (Rs) - sensitizer-induced
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H228 - Flammable solid
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H250 - Catches fire spontaneously if exposed to air
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H261 - In contact with water releases flammable gases
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: **Priority List of Hazardous Substances (rank 179).**

**IRON**

ID: 7439-89-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-04-04**

#: **0.00 - 0.02**

GS: **LT-P1**

RC: **UNK**

NANO: **No**

ROLE: **Metal Alloy**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: **By product of the galvanization process.**

## Section 3: Certifications and Compliance

*This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.*

### VOC EMISSIONS

CDPH Standard Method V1.2 (Section 1350/CHPS) - Not Applicable

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2020-**

EXPIRY DATE:

CERTIFIER OR LAB: **NA**

APPLICABLE FACILITIES: **NA**

**04-16**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **CDPH Standard V1.2 (Section 01350/CHPS)- Not Applicable**

## Section 4: Accessories

*This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.*

### INSULATION BOARD

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Insulation Board from Knauf insulation can be added to cellular flutes of structural deck at point of manufacture. This improves the acoustical properties of the installed product. Product with insulation is called 'Acustadek' or Acoustical Deck. More product information available here: <https://www.knaufnorthamerica.com/en-us/products/fiberglass-insulation-board/earthwool-insulation-board>

### DECK PRIMER

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

White or gray water-based primer available as specified by customer. When ordered with primer product is referred to as Primeshield. See Section 5 General Notes for more detail.

## Section 5: General Notes

Residuals reported per chemical analysis by steel suppliers. Deck Primer is a product option but weight max in finished Steel Deck is 0.0099%. The weight contribution of steel and metallic coating to the finished product will vary based on the gauge (thickness) of the base steel and weight of the metallic coating. All figures referenced in this guide reflect 22 gauge material and a G90 coating (a combination of 95.65% steel and 4.35% metallic coating). This represents the lightest standard offer base steel and heaviest metallic coating combination. All metallic coated steel deck has a contribution ratio of steel between 96.65% -99.16% and a metallic coating range of 4.35%-0.84%. Prime shield (primer painted) or 'Cold Rolled' steel deck does not have a metallic coating and steel will represent 100% of product weight. This HPD covers the assessment of the following ASC Steel Deck products: 1 ½" Type B Deck\*, 3" Type N Deck\*, 2" Type 2W Deck\*, 3" Type 3W Deck\*, 7/8" Roof and Form Deck\*, and 4 ½", 6", 7 ½" Deep Deck\*. \*Applies to cellular and Acustadek® (welded and riveted) version of product and offered in 18-22 gauge.



## MANUFACTURER INFORMATION

MANUFACTURER: **ASC Profiles**

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**West Sacramento CA 95691, US**

WEBSITE: **www.ascprofiles.com**

CONTACT NAME: **Michelle Vondran**

TITLE: **Technical Manager**

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## KEY

**OSHA MSDS** Occupational Safety and Health Administration Material Safety Data Sheet

**GHS SDS** Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

### Hazard Types

**AQU** Aquatic toxicity

**CAN** Cancer

**DEV** Developmental toxicity

**END** Endocrine activity

**EYE** Eye irritation/corrosivity

**GEN** Gene mutation

**GLO** Global warming

**MAM** Mammalian/systemic/organ toxicity

**MUL** Multiple hazards

**NEU** Neurotoxicity

**OZO** Ozone depletion

**PBT** Persistent Bioaccumulative Toxic

**PHY** Physical Hazard (reactive)

**REP** Reproductive toxicity

**RES** Respiratory sensitization

**SKI** Skin sensitization/irritation/corrosivity

**LAN** Land Toxicity

**NF** Not found on Priority Hazard Lists

### GreenScreen (GS)

**BM-4** Benchmark 4 (prefer-safer chemical)

**BM-3** Benchmark 3 (use but still opportunity for improvement)

**BM-2** Benchmark 2 (use but search for safer substitutes)

**BM-1** Benchmark 1 (avoid - chemical of high concern)

**BM-U** Benchmark Unspecified (insufficient data to benchmark)

**LT-P1** List Translator Possible Benchmark 1

**LT-1** List Translator Likely Benchmark 1

**LT-UNK** List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

**NoGS** Unknown (no data on List Translator Lists)

### Recycled Types

**PreC** Preconsumer (Post-Industrial)

**PostC** Postconsumer

**Both** Both Preconsumer and Postconsumer

**Unk** Inclusion of recycled content is unknown

**None** Does not include recycled content

### Other Terms

#### Inventory Methods:

**Nested Method / Material Threshold** Substances listed within each material per threshold indicated per material

**Nested Method / Product Threshold** Substances listed within each material per threshold indicated per product

**Basic Method / Product Threshold** Substances listed individually per threshold indicated per product

**Nano** Composed of nano scale particles or nanotechnology

**Third Party Verified** Verification by independent certifier approved by HPDC

**Preparer** Third party preparer, if not self-prepared by manufacturer

**Applicable facilities** Manufacturing sites to which testing applies

*The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:*

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

*Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.*

*The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.*

*The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.*