SAFETY DATA SHEET (SDS)

ShadowDeck™ SuperSpan Aluminium Subframe System — New Zealand and Australia

ShadowDeck™
SuperSpan Aluminium Framing System

1. IDENTIFICATION

Product Name	ShadowDeck™ SuperSpan Aluminium Subframe System
Components	Aluminium alloy extrusions (6061-T6 [confirm alloy and temper against mill certificates]); Grade 316 stainless steel connection brackets, M6 T-head bolts and M6 flanged nuts; UV-stabilised nylon tile spacers, biscuit joiners, T-joiners and hidden deck fasteners
Recommended Use	Structural subframe for external decks
Supplier (NZ)	ShadowDeck Limited, trading as ShadowDeck™, [address], New Zealand | [phone]
Supplier (Australia)	[Name, ABN, address, phone]
Emergency (NZ)	Emergency services 111 | National Poisons Centre 0800 764 766
Emergency (Australia)	Emergency services 000 | Poisons Information Centre 13 11 26

2. HAZARD IDENTIFICATION

Not classified as hazardous in the form supplied. This applies under the Hazardous Substances and New Organisms Act 1996 and the Health and Safety at Work (Hazardous Substances) Regulations 2017 (NZ), and under the GHS as adopted by the Work Health and Safety Regulations (Australia). No label elements are required.

Hazards during processing: cutting, drilling or grinding creates dust, swarf and sharp edges. Fine aluminium dust can be irritating and, in high airborne concentrations, can form a combustible dust. Welding or grinding stainless steel creates fumes and dust containing chromium and nickel compounds, which can include hexavalent chromium, a known carcinogen. Overheated or burning nylon releases irritating fumes.

3. COMPOSITION

Aluminium profiles

Ingredient	CAS number	Proportion (%)
Aluminium	7429-90-5	Balance (≈ 95.8–98.6)
Magnesium	7439-95-4	0.8–1.2
Silicon	7440-21-3	0.4–0.8
Iron	7439-89-6	≤ 0.7
Copper	7440-50-8	0.15–0.4
Chromium	7440-47-3	0.04–0.35
Zinc	7440-66-6	≤ 0.25
Manganese	7439-96-5	≤ 0.15
Titanium	7440-32-6	≤ 0.15

Typical composition of alloy 6061 [update if the alloy is 6063].

Stainless steel brackets, M6 T-head bolts and M6 flanged nuts (Grade 316)

Ingredient	CAS number	Proportion (%)
Iron	7439-89-6	Balance
Chromium	7440-47-3	16–18
Nickel	7440-02-0	10–14
Molybdenum	7439-98-7	2–3
Manganese	7439-96-5	≤ 2
Silicon	7440-21-3	≤ 0.75
Carbon	7440-44-0	≤ 0.08

Nylon components (tile spacers, joiners, hidden deck fasteners)

Ingredient	CAS number	Proportion (%)
Polyamide [PA6 / PA66 — confirm]	[25038-54-4 (PA6) / 32131-17-2 (PA66)]	[> 95]
Carbon black (colourant)	1333-86-4	[< 2]
UV stabiliser	[Proprietary]	[< 2]

4. FIRST AID

No first aid is needed for the product as supplied. The following applies to dust or fumes produced by processing:

- Eyes: flush with running water for at least 15 minutes. Seek medical advice if irritation persists.
- Skin: wash with soap and water. Treat cuts from sharp edges as normal.
- Inhaled: move to fresh air. Seek medical advice if coughing or breathing difficulty continues.
- Swallowed: rinse mouth with water. Seek medical advice if symptoms develop.

5. FIREFIGHTING MEASURES

The aluminium and stainless steel components are non-combustible. The nylon components are combustible: burning nylon produces carbon monoxide, nitrogen oxides and possibly hydrogen cyanide. For fires involving nylon, use water spray, foam or dry chemical, and wear self-contained breathing apparatus in enclosed areas. For fires involving aluminium dust or molten metal, use a Class D dry powder extinguisher or dry sand. Do not use water or foam on burning dust or molten metal, as this can release hydrogen gas. Hazchem code: none.

6. ACCIDENTAL RELEASE

Collect the material for reuse or recycling. Clean up dust by vacuum or damp methods, without creating airborne dust.

7. HANDLING AND STORAGE

Wear gloves to protect against sharp edges and swarf. Lift and stack bundles safely on a level base. Store the product dry and under cover, with airflow between profiles to prevent water staining. Keep it away from acids, strong alkalis, and treated timber.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Keep dust and fume levels as low as reasonably practicable, and below the exposure standards published by WorkSafe New Zealand and Safe Work Australia (current editions) [insert current values for aluminium dust and welding fume]. Use local extraction or work in the open air. When welding or grinding stainless steel, control exposure to chromium (including hexavalent chromium) and nickel compounds using extraction and a suitable respirator. Where exposure cannot be controlled, wear a P1/P2 respirator (AS/NZS 1715 and 1716). Also wear safety glasses (AS/NZS 1337), gloves (AS/NZS 2161), and hearing protection when cutting.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Aluminium extrusions [silver / finish colour], stainless steel parts, and small black nylon parts
Odour	None
Aluminium melting range	≈ 582–652 °C
Density	Aluminium ≈ 2.70 g/cm³ | Stainless steel ≈ 8.0 g/cm³ | Nylon ≈ 1.1–1.15 g/cm³
Nylon melting point	[≈ 220 °C (PA6) / ≈ 260 °C (PA66) — confirm]
Solubility in water	Insoluble
Flammability	Metal components non-flammable; nylon components combustible

10. STABILITY AND REACTIVITY

The product is stable under normal conditions. It reacts with strong acids and alkalis, and fine dust can react with water, releasing hydrogen gas. Avoid contact with halogens and oxidising agents, and avoid generating dust.

11. TOXICOLOGICAL INFORMATION

No toxicological hazard is expected from the solid product. Dust may cause mild irritation to the eyes, skin and respiratory tract. Repeated high exposure to dust or fume may aggravate existing respiratory conditions.

12. ECOLOGICAL INFORMATION

In solid form, the product is not expected to be harmful to aquatic or terrestrial organisms. It is persistent but recyclable.

13. DISPOSAL

Separate the metals and recycle the aluminium and stainless steel as scrap. Recycle the nylon parts where facilities exist. Otherwise, dispose of in accordance with local authority requirements.

14. TRANSPORT

Not dangerous goods for transport by road, rail, sea or air under NZS 5433 (NZ), the Australian Dangerous Goods Code, or the IMDG and IATA codes. No UN number is allocated.

15. REGULATORY INFORMATION

NZ: not a hazardous substance in the form supplied, so no HSNO approval is required [confirm]. Australia: not scheduled under the Poisons Standard (SUSMP).

16. OTHER INFORMATION

Date of Preparation	29 September 2026
Version	1.0 — review at least every five years, or sooner if the product or regulations change
Contact	Phone [phone] | Email [email] | www.shadowdeck.co.nz

This information is believed to be accurate at the date of preparation. Users should make their own assessment of workplace risks when processing this product.