

SECONDARY CONTAINMENT

TO PREVENT HARM FROM HAZARDOUS SUBSTANCES, TO PEOPLE AND THE ENVIRONMENT



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FOREWORD

Businesses use products with hazardous properties (hazardous substances) on a daily basis. Goods that are flammable, corrosive, explosive, toxic, oxidising or ecotoxic are useful because of their hazardous properties i.e. petrol that didn't ignite wouldn't be a very useful fuel for vehicles.

However, because of their properties, hazardous substances can cause serious harm to people and the environment and additional care must be taken when storing, handling and disposing of these substances.

Dalton International is dedicated to "Preventing harm from hazardous substances, to people and the environment". We do this every day by working towards our Vision of being New Zealand's leading provider of safety solutions for businesses working with hazardous substances.



WHAT IS SECONDARY CONTAINMENT

A system or systems that enables users to contain and recover liquid substances or those substances likely to liquefy in the event of a fire. When your primary container fails or is punctured, your secondary containment is what stops the liquid from running out the door, mixing with incompatible substances, creating an unnecessary slip hazard, or simply makes recovery and clean up much easier and cheaper.

A secondary containment system can be achieved in numerous ways including:

- Bunding across a warehouse doorway
- Bunding in front of racking
- The use of spill pallets
- The use of spill decks
- Purpose built concrete bunds
- Double skin tanks
- A mix of any or all of the above.

DESIGNING YOUR SECONDARY CONTAINMENT SYSTEM

When designing your secondary containment system there are a number of things you will need to take into account:



HOW MUCH ARE YOU LOOKING TO CONTAIN?

The Hazardous Substance Regulations – Dec 2017 set out the thresholds at which secondary containment is mandatory and how much you're required to contain. The containment amounts vary depending on the class of hazardous substance, the size of the containers and the total pooling potential. However, it is worth remembering that regardless of thresholds and containment amounts set out in the Hazardous Substance Regulations, the Resource Management Act (RMA) has made it an offence to discharge ANY amount of hazardous substance onto the land or water so best practice is to contain all the liquids you use or store.



SHOULD I USE SECONDARY CONTAINMENT EVEN IF I HAVE A SMALL AMOUNT OF HAZ-ARDOUS SUBSTANCES?

Because discharging even a small amount of hazardous substances into the environment is an offence under the RMA it's best to contain all liquids. Using secondary containment also means you minimise the chance of a spill becoming a slip risk, coming in contact with incompatible substances or damaging other stock or equipment.



WHERE SHOULD I PUT MY SECONDARY CONTAINMENT?

The closer you can get to the primary container the less chance there is of spills coming in contact with incompatible substances or creating a slip hazard. For example placing drums on a spill pallet ensure that leaks or spills end up in the pallet below rather than spreading across the warehouse floor. However, if you store large amounts of liquids it may not be cost effective to place these all on spill pallets. In this case placing bunding in front of rack or across the warehouse door way may be a better option.



WHAT SHOULD MY SECONDARY CONTAINMENT BE MADE OF?

Secondary containment systems can be made of various materials but the main thing to ensure is that they will be able to contain the liquid in the event of a spill or leak. Common materials used include, concrete, steel, plastic and polyurethane.



HOW WILL YOU GET CONTAINERS ON AND OFF YOUR SPILL PALLETS?

Standard spill pallets stand anywhere from 25-45cm high which means you need to have a forklift to get drums on an off. In some cases where space is limited such as small rooms or around production lines this may not be practical. In these cases a low profile spill deck system is likely to be a better option as drums can be rolled up by hand or with a stack trolley.



DO YOU NEED ACCESS TO DRUM TOPS?

If you're decanting into drums or drawing off from them, then making sure the drum tops are at an easily accessible height will be important. In these circumstances low profile spill decks or spill deck bladder systems will be the way to go.



WHAT IF MY SECONDARY CONTAINMENT IS OUTSIDE?

Often secondary containment needs to be outside to contain fuel tanks or large stationary containers. Where possible it's best to have a roof or cover that stops rainwater filling the secondary containment bund. The Ultra Hardtops are useful for storing drums, IBCs and other small containers outside as they have built in containment and a roller top that keep the rain out. For outdoor concrete bunds that fill with rainwater you may need to install an Ultra Self Bailer that allows rain water to leave the bund while filtering any hydrocarbons that may be present.



WHY NOT JUST USE SPILL KITS?

Spill kits are certainly a useful tool for cleaning up spills when they occur but secondary containment offer a number of advantages including:

- It operates 24 hours a day, 7 days a week, even when you're at home asleep
- You only need to buy it once. If you have a spill you simply empty the spill clean out the residue then your secondary containment is ready to go again.
- Recovery of spill liquids is easier and in some cases may be able to be re-used.
- Although the initial expense may be more over the life of the product (usually 10+ years), secondary containment normally works out more cost effective.



HOW DO I KNOW I'VE MET ALL MY LEGAL OBLIGATIONS WHEN IT COMES TO SECONDARY CONTAINMENT?

A test certifier is an independent person approved to issue test certificates. A test certificate confirms that individuals, sites or containers are compliant with the regulations. **www.worksafe.org.nz** is also a good source of information include a basic calculator that allows you see what controls you need to put in place to meet your obligations.

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WHERE CAN I FIND MORE INFORMATION?

Our website www.dilnz.co.nz contains a wealth of information

www.epa.govt.nz is a useful source of information about known chemicals including what their hazard classifications are as well as a list of approved test certifiers.

www.worksafe.govt.nz has lots of information and guides that are useful to let you know what you're required to do around hazardous substances.

www.legislation.govt.nz allows you to search Acts and Regulations including the "Health and Safety at Work (Hazardous Substance) Regulations 2017" which set out exactly what your legal requirements are in relation to secondary containment.

Of course you can always call **Dalton International Limited on 0800 323 223**, and speak to one of our technical experts.

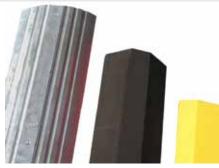
DRIVE OVER BUNDING

ULTRABUND®, ALUMINIUM AND EVA BUNDING





| CODE | DESCRIPTION | DIMENSIONS (MM) | | M) |
|---|---|-----------------|-------|--------|
| | | LENGTH | WIDTH | HEIGHT |
| STDB150 | SpillTech UltraBund® 150 | 1000 | 150 | 25 |
| STDB150CNR | SpillTech UltraBund® 150 Corner | 197 | 197 | 25 |
| STDB200 | SpillTech UltraBund® 200 | 1000 | 200 | 32 |
| STDB200CNR | SpillTech UltraBund® 200 Corner | 245 | 245 | 32 |
| STDB-1K5 SpillTech UltraBund® 5m Install Kit, 30 x anchor Dynobolts, 8 spacers, 3 x tubes of adhesive sealant | | | | |
| STDBDYNA | SpillTech UltraBund® Dynabolts 10mm x 55mm (need 5 per 1m length) | | | |
| STDBS | SpillTech UltraBund® 5mm spacers | | | |
| STDBGLUE | ADOS MS Grey Adhesive Sealant 400g | | | |



Spilltech Aluminium Bunding - Extra Heavy duty bunding, ideal for high traffic areas and containing flammable liquids.

SpillTech EVA Foam Bunding -Light duty for low and no traffic environments.

| CODE | DESCRIPTION | DIMENSIONS (MM) | | |
|-------------|---|---------------------|----------------|--------|
| | | LENGTH | WIDTH | HEIGHT |
| STAB33 | SpillTech Aluminium 1.2m | 1200 | 185 | 33 |
| STAB33-IK | Install kit for 1 length including 4 x anchor bolts, 4 x finishing plate so | crews, 1 x tube adh | nesive sealant | |
| STEVA20 | SpillTech EVA Foam Bunding Black 20mm | 2000 | 140 | 20 |
| STEVA20Y | SpillTech EVA Foam Bunding Yellow 20mm | 2000 | 140 | 20 |
| STEVA20C | SpillTech EVA Foam Bunding Black 20mm Corner | 500 | 500 | 20 |
| STEVA20YC | SpillTech EVA Foam Bunding Yellow 20mm Corner | 500 | 500 | 20 |
| STEVA40 | SpillTech EVA Foam Bunding Black 40mm | 2000 | 140 | 40 |
| STEVA40Y | SpillTech EVA Foam Bunding Yellow 40mm | 2000 | 140 | 40 |
| STEVA40C | SpillTech EVA Foam Bunding Black 40mm Corner | 500 | 500 | 40 |
| STEVA40YC | SpillTech EVA Foam Bunding Yellow 40mm Corner | 500 | 500 | 40 |
| STEVAGLUE | Ados F22 - 500ml with applicator (adheres up to 7 x 2m bunds) | | | |
| STEVAGLUE1L | Ados F22 - 1L (adheres up to 14 x 2m bunds) | | | |
| STEVAGLUE4L | Ados F22 - 4L (adheres up to 56 x 2m bunds) | | | |

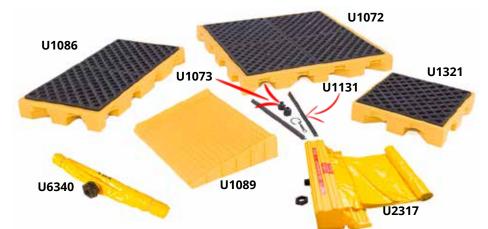
DRUM CONTAINMENT

ULTRA-SPILL DECKS

UltraTech spill pallets and spill decks are designed to provide cost effective secondary containment for drums and smaller containers. Capture spills and leaks at the source to avoid pollution of the surrounding environment, damage to stock or unnecessary slip risks. Modules are easily connected together with flow-through bulkhead fittings to allow an unlimited number of configurations.



- Polyethylene construction meets a wide range of chemical compatability needs.
- Low Profile height (14.6cm) offers safe and convenient loading/unloading of drums.
- Applications include hazardous waste collection, storage of virgin chemicals, drum dispensing and battery storage.
- Optional loading ramps provide added drum handling safety and convenience.
- All Ultra-Spill Decks offer slip-resistant grating to reduce slip hazards.



| CODE: | DESCRIPTION | DIMENSIONS | UNIFORMLY DISTRIBUTED LOAD | CONTAINMENT CAPACITY | WEIGHT |
|--------------------------------|-----------------------|-------------------------|-------------------------------|-------------------------|--------|
| U1321 | 1 Drum Spill Deck | 657mm x 657mm x146mm | 681KG | 42L | 10KG |
| U1086 | 2 Drum Spill Deck | 1321mm x 657mm x146mm | 1361KG | 83L | 18KG |
| U1072 | 4 Drum Spill Deck | 1321mm x 1321mm x 146mm | 2722KG | 167L | 32KG |
| U1131 Ultra-Spill Deck T-Strip | | | | | |
| U1073 | Bulkhead Fittings | | | | |
| U2317 | Bladder Attachment | | | | |
| U6340 | Replacement Bladder | | | | |
| U1089 | Ultra-Spill Deck Ramp | | | | |

ULTRA-SPILL DECK BLADDER SYSTEM

All the benefits of a low profile spill deck, including easy loading and unloading of drums and better access to drum tops. PLUS a hidden bladder which automatically unfurls to capture large spills giving an additional 250L of containment. Made of 100% polyethylene construction.



| CODE: | DESCRIPTION | DIMENSIONS | CONTAINMENT CAPACITY |
|-------|--------------------------------|-------------------------|---|
| U1320 | 1 Drum Spill Deck with bladder | 657mm x 775mm x146mm | 292L (41L in the deck + 250L in the bladder) |
| U2329 | 2 Drum Spill Deck with bladder | 1321mm x 775mm x146mm | 333L (83L in the deck + 250L in the bladder |
| U2330 | 4 Drum Spill Deck with bladder | 1321mm x 1438mm x 146mm | 417L (167L in the deck + 250L in the bladder) |

ULTRA-SPILL PALLETS

Ultra Spill Pallets capture leaks and spills. 100% polyethylene construction is resistant to a wide range of chemicals and won't rust or corrode. Non-slip grating is easily removed for inspection or clean up. Forklift pockets allow easy placement .





| CODE: | DESCRIPTION | | | CONTAINMENT CAPACITY | WEIGHT |
|-------|---------------------|-------------------------|--------|-------------------------|--------|
| U2504 | 2 Drum Spill Pallet | 1346mm x 737mm x 419mm | 681KG | 250L | 29KG |
| U1230 | 4 Drum Spill Pallet | 1295mm x 1295mm x 254mm | 2722KG | 250L | 41KG |

OVERPACK DRUMS

Special containment units that meet or exceed the stringent UN guidelines for the transport of damaged hazardous liquid drums. Comes in two sizes to fit either 20 or 200 litre containers. Perfect for use with damaged containers or as a precautionary measure when transporting hazardous substances.

(Other sizes available on indent)



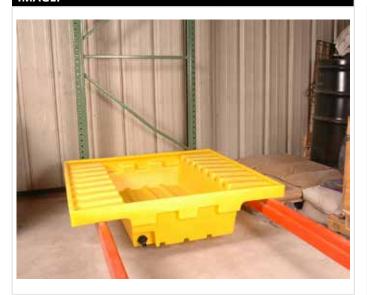


| CODE: | DESCRIPTION | CONTAINMENT CAPACITY | WEIGHT |
|-------|---------------------|----------------------|--------|
| U0587 | Ultra-Overpack 76L | 76L | 5.5KG |
| U0580 | Ultra-Overpack 360L | 360L | 22KG |

ULTRA-RACK SUMP

Polyethylene warehouse rack containment sump keeps dangerous and costly spills off the floors, equipment and inventory.

| CODE: | DESCRIPTION | CONTAINMENT CAP. |
|--------|-----------------|------------------|
| U2395 | Ultra-Rack Sump | 250L |
| IMAGE: | | |



ULTRA-DRUM TRUCKS

Drum handling, dispensing and containment in one unit. Rugged polyethylene construction offers excellent chemical resistance. Large pneumatic wheels roll easily over shop and factory floors.

| CODE: | DESCRIPTION |
|--------|------------------|
| U1310 | Ultra-Drum Truck |
| IMAGE: | |
| | |

ULTRA OUTDOOR HARDTOP CONTAINMENT

Store IBC tanks and drums outside with the IBC Hardtops or Drum Hardtops. Polyethylene construction is resistant to rust, corrosion and a wide range of chemicals. Hardtops have a combination of roll top and swing out doors allowing easy access for forklifts.



| CODE: | DESCRIPTION | CONTAINMENT CAPACITY | WEIGHT |
|-------|--|----------------------|--------|
| U9640 | Ultra 1 Drum HardTop Plus | 265L | 34KG |
| U9612 | Ultra 2 Drum HardTop Plus | 250L | 118KG |
| U9636 | Ultra 4 Drum HardTop Plus | 284L | 200KG |
| U9658 | Ultra 4 Drum HardTop Extender Kit | 284L | 171KG |
| U1162 | Ultra IBC HardTop Plus | 1382L | 239KG |
| U1148 | Ultra Twin IBC HardTop Plus | 2025L | 484KG |
| U0676 | Ultra Polyethylene Loading Ramp (for U9612 or U9636) | n/a | 19.5KG |

IBC TANK CONTAINMENT

205KG

ULTRA-IBC SPILL PALLET



Ultra IBC spill pallets offer a range of benefits that make them stand head and shoulders above the competition.

- 100% polyethylene construction won't rust or corrode and is chemically resistant
- Load bearing capacity is greater than 3.5 tonne allowing double stacking of IBCs
 Wide platform makes any positioning of IBCs and farklift poskets for any positioning of pallet

| Whete platform makes easy positioning of bets and forking pockets for easy positioning of panet | | | | | |
|---|-----------------------|----------------------|--------|--|--|
| CODE: | DESCRIPTION | CONTAINMENT CAPACITY | WEIGHT | | |
| U1157 | IBC Spill Pallet Plus | 1363L | 147KG | | |

2025L

ULTRA-MODULAR IBC CONTAINMENT

Twin IBC Spill Pallet

U1140



Low cost spill containment for multiple IBC tanks. Low profile for easy and safe access to the top of IBC tanks. "Flow Through" connections allow spills to share capacity across all pallets. Expansion tanks available when additional capacity is required.

| CODE: | DESCRIPTION | CONTAINMENT CAPACITY | WEIGHT |
|-------|---------------------------------|----------------------|--------|
| U1125 | 2 Pallet + 2 Expansion tanks | 1060L | 141KG |
| U1126 | 3 Pallet + 2 Expansion tanks | 1344L | 198KG |
| U1127 | 4 pallet + 1 Expansion tank | 1382L | 241KG |
| U1128 | 5 Pallet | 1419L | 284KG |
| U9630 | Spill Pallet Plus (Pallet Only) | 284L | 57KG |

IBC CONTAINMENT ACCESSORIES



ULTRA CONTAINMENT BERM - RAPID RISE

Sidewalls remain down during normal operations, loading and unloading, minimising trip hazards. In the case of a spill the foam ring around the top perimeter of the Containment Berm rises with the level of the spilled liquid.



| CODE: | DESCRIPTION | DIMENSIONS | CONTAINMENT CAPACITY | COPOLYMER 2000 WEIGHT |
|--|------------------|-------------------------------------|-------------------------|--------------------------|
| U8431 | Rapid Rise Model | 1829mm (L) x 1829mm (W) x 305mm (H) | 1018L | 17KG |
| U8432 | Rapid Rise Model | 3048mm (L) x 3048mm (W) x 305mm (H) | 2831L | 31KG |
| U8437 | Rapid Rise Model | 7925mm (L) x 3658mm (W) x 305mm (H) | 8831L | 68.5KG |
| ODTIONS Country of Target Dates Dullance Country and Calif Dates | | | | |

OPTIONS: Ground Tarps, Track Belts, Pullover Covers and Self Bailers

ULTRA CONTAINMENT BERM - STAKED WALLS

Stake Wall Model Containment Berms feature a unique design that allows the sidewalls to collapse in either direction and spring back automatically to their upright position. Roll drums over the sidewalls, drive trucks through them, and the sidewalls always return to vertical without assistance.





Custom Sizes Available on request

| CODE: | DESCRIPTION | DIMENSIONS | CONTAINMENT CAPACITY | WEIGHT |
|-------|------------------|--------------------------------------|-------------------------|--------|
| U8209 | Stake Wall Model | 1800mm (L) x 1800mm (W) x 305mm (H) | 1018L | 22KG |
| U8210 | Stake Wall Model | 3000mm (L) x 3000mm (W) x 305mm (H) | 2831L | 42KG |
| U8222 | Stake Wall Model | 3000mm (L) x 12200mm (W) x 305mm (H) | 11326L | 121KG |

ULTRA CONTAINMENT WALL

Modular, hard-walled system provides long-term, high capacity spill containment. Heavy-duty, 30 mil, textured polyethylene liner provides rugged, impermeable barrier to capture leaks and spills. Versatile system can be easily disassembled for reuse at future sites. Unlike some containment systems, the Ultra-Containment Wall is not secured to the substrate so it is perfect use in parking lots, sand, rocky soil, muddy soil, frozen soil or on concrete areas.



| CODE: | WALL HEIGHT & DESCRIPTION | DIMENSIONS | WEIGHT |
|-------|-----------------------------------|------------------------------------|---------------------------|
| U8760 | 0.3 m - Straight Section | 3048mm (L) x 305mm (W) x 305mm (H) | 15KG |
| U8761 | 0.3 m - Corner Section | 559mm (L) x 559mm (W) x 305mm (H) | 4KG |
| U8762 | 0.6 m - Straight Section | 2540mm (L) x 610mm (W) x 610mm (H) | 32KG |
| U8763 | 0.6 m - Corner Section | 889mm (L) x 762mm (W) x 610mm (H) | 12KG |
| U8764 | 0.9 m - Straight Section | 1829mm (L) x 610mm (W) x 914mm (H) | 27.5KG |
| U8765 | 0.9 m - Corner Section | 762mm (L) x 762mm (W) x 914mm (H) | 16.5KG |
| U8770 | 30 ml Textured Polyethylene Liner | Custom (per sq. ft./m) | 4.85KG per m ² |

| COMPLETE SYSTEMS: | | | | | |
|-------------------|----------------|---------------------------------------|---------------------------------|-------------|----------|
| CODE: | WALL HEIGHT | USABLE DIMENSIONS | ITEM QUANTITY | CONTAINMENT | WEIGHT |
| U8790 | 0.3 m | 14900mm (L) x 3000mm (W) x 300mm (H) | 12-Straight, 4-Corners, 1-Liner | 15058L | 342KG |
| U8791 | 0.3 m | 20700mm (L) x 20700mm (W) x 300mm (H) | 28-Straight, 4-Corners, 1-Liner | 131740L | 937.1KG |
| U8792 | 0.6 m | 16800mm (L) x 4900mm (W) x 600mm (H) | 18-Straight, 4-Corners, 1-Liner | 51921L | 826KG |
| U8793 | 0.6 m | 19200mm (L) x 19200mm (W) x 600mm (H) | 32-Straight, 4-Corners, 1-Liner | 227462L | 1564.9KG |
| U8794 | 0.9 m | 16800mm (L) x 4900mm (W) x 900mm (H) | 24-Straight, 4-Corners, 1-Liner | 54268L | 978.4KG |
| U8795 | 0.9 m | 18600mm (L) x 18600mm (W) x 900mm (H) | 44-Straight, 4-Corners, 1-Liner | 316392L | 1795.3KG |

ULTRA UTILITY AND SPILL TRAYS

Ultra Utility Trays made of heavy duty polyethylene construction will not rust or corrode. Ribbed bottom keeps containers elevated above spills and leaks. Nestable for easy storage when not in use. **Ultra Spill Trays** safely stores bottles, beakers and other labware, which makes decanting of small quantity of liquids safer, cleaner and more manageable.



| CODE: | DESCRIPTION | DIMENSIONS | CONTAINMENT CAPACITY | WEIGHT |
|-------|--------------------|------------------------|-------------------------|--------|
| U1031 | Ultra Utility Tray | 305mm x 1219mm x 121mm | 45L | 3.5KG |
| U1032 | Ultra Utility Tray | 610mm x 1219mm x 121mm | 91L | 5KG |
| U1033 | Ultra Utility Tray | 762mm x 1219mm x 121mm | 113L | 5.5KG |
| U1034 | Ultra Utility Tray | 610mm x 914mm x 121mm | 68L | 3.5KG |
| U1035 | Ultra Utility Tray | 914mm x 914mm x 121mm | 102L | 5KG |
| U1060 | Ultra Spill Tray | 432mm x 305mm x 102mm | 6.5L | 2.5KG |









FUNNELS, SELF BAILERS AND ULTRA SPILL BERM

Bung Access Funnels turn your whole drum top in to a funnel. **Ultra Burp-free funnel** screws into the bung eliminating rocking while pouring and the built in snorkel allows air to vent to stop burping. The **Ultra Spill Berm** seals off spills from drains and doorways. **Ultra Self Bailers** passively filter hydrocarbons from rainwater in outdoor containment products and bunds.



| CODE: | DESCRIPTION | SPECIFICATIONS | WEIGHT |
|-------|--|--------------------------|--------|
| U0482 | Ultra Funnel - Bung Access | 23L containment capacity | 4KG |
| U0484 | Ultra Funnel - Bung Access with Hinged Lid | 23L containment capacity | 6KG |
| U0651 | Ultra Funnel - Burp Free with Hinged Lid (For Drums) | n/a | 1KG |
| U0656 | Ultra Funnel - Burp Free with Hinged Lid (For IBC's) | n/a | 3KG |
| U2100 | Ultra Spill Berm - Orange | 3048mm x 102mm x 58mm | 14KG |
| U2104 | Ultra Spill Berm Carry Case | n/a | 484KG |
| U9935 | Self Bailer Standard | 29L per hour flow rate | 1KG |
| U9936 | Self Bailer - Replacement Filters | n/a | n/a |

DISTRIBUTED BY

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