

Barracuda Brick Slip Support System - Health & Safety Guidance and COSHH [Control of Substances Hazardous to Health]

The Barracuda system, in its supplied form, does not contain substances that are known to be hazardous to health.

The Barracuda rails [Types R1, R2 and R3] are cold rolled stainless steel and the substructure elements [Types VL and VT and some secondary substructure components] are fabricated from extruded aluminium alloy. All fasteners are stainless steel.

There is the risk of superficial injury, cuts, abrasions etc. from contact with material edges. Always wear protective gloves when unpacking, handling and installing the Barracuda system.

The Barracuda system makes use of extruded aluminium substructure components which are usually supplied 'cut to length'. This cutting to length process may leave some small chips of aluminium within or on the extrusions or within associated packaging. Always wear protective eyewear when unpacking, handling and installing the Barracuda system components.

Adequate care must be taken should there be the requirement to cut/trim Barracuda rails or substructure elements 'to length' on site or at the installer's fabrication facility.

Cutting Barracuda Rails [Types R1, R2 and R3]

Barracuda stainless steel rails can be cut with a Tungsten Carbide Tipped [TCT] blade using a saw specifically designed to use a TCT blade [please note that a TCT blade will not usually be suitable for use with a standard 'chop saw' that normally utilises an abrasive cutting disc because it will rotate the TCT blade too quickly]. A TCT blade specifically designed to cut stainless steel should be used. TCT blades specifically designed to dry cut stainless steel are expensive and will blunt relatively quickly. Because of this the most practical/cost effective way of cutting stainless steel components 'on site' is by using an abrasive cutting disk. A large diameter abrasive cutting disc fitted to a bench or stand mounted 'chop saw' can be used [these large diameter blades are usually approximately 3mm thick] or a hand held 125mm 'disc cutter' fitted with a small, usually 115mm diameter cutting disc [these small cutting disks are usually just 1mm thick]. If these small 1mm thick cutting discs are used, ensure that they are labelled specifically as being suitable for cutting stainless steel [they will usually say INOX or Stainless Steel on the individual discs or their packaging] and that they are good quality, ideally a recognised brand which should reduce the risk of breakage. Regardless of which Barracuda rail cutting method is used everybody engaged in or within the vicinity of the cutting process must wear appropriate eye, respiratory, hand and ear protection.

Wear **eye protection** conforming to **BS EN 166** [we recommend the use of a face shield with high energy impact protection **mechanical strength A**]. As well as eye protection, a face mask will protect the face from soft tissue injury. Additional safety spectacles or prescription glasses can be worn under a face mask.

Barracuda Brick Slip Support System - Health & Safety Guidance and COSHH [Control of Substances Hazardous to Health] – continued:

Wear **respiratory protection** [a mask] conforming to **BS EN 149** [we recommend the use of a mask with a minimum rating **FFP3**]

Wear **hand protection** [gloves] conforming to **BS EN 388**. Gloves conforming to BS EN 388 are rated for; abrasion resistance, cut resistance, tear resistance and puncture resistance. These characteristics are scored with a number 1 to 4 [1 to 5 for cut resistance]. The higher the number the more resistant the gloves are to that particular hazard [we recommend that you wear gloves with a **rating of 3 or above**].

Wear **ear protection** conforming to **BS EN 352**. The effectiveness of the ear protection required will depend upon the noise level caused by the cutting process. Different cutting processes/techniques will cause potentially, different noise levels. Hearing protection must be provided and worn when noise levels are in the range of 80dB to 85dB. 87dB is the maximum exposure limit [we recommend that; regardless of how short the duration of the cutting process, and the noise levels caused by it, as a minimum, **ear plugs should be worn conforming to BS EN 352 – 2**].

Cutting stainless steel or with a TCT blade will result in the work piece and the blade remaining relatively cool. Cutting stainless steel with an abrasive cutting disc will generate considerable localised heat in both the workpiece and particularly the smaller 'off cut' and the blade. This heat will dissipate quickly from larger workpieces but you might need a 'hot works permit' to carry out this work.

Cutting Barracuda Substructure [Types VL and VT]

Barracuda aluminium substructure can be cut with a Tungsten Carbide Tipped [TCT] blade using a saw specifically designed to use a TCT blade [please note that a TCT blade will not usually be suitable for use with a standard 'chop saw' that normally utilises an abrasive cutting disc because it will rotate the TCT blade too quickly]. A TCT blade specifically designed to cut aluminium should be used. Always use a bench or stand mounted saw designed for cutting aluminium sections. Make sure that the workpiece is securely 'clamped' during the cutting process. Avoid cutting aluminium sections with a 'hand held' disc cutter. The small diameter, 1mm thick abrasive cutting discs usually used with these machines can 'stick' and potentially break when trying to cut through relatively soft aluminium. When cutting aluminium these abrasive cutting discs tend to wear quickly and produce a considerable amount of dust. When cutting Barracuda aluminium substructure, everybody engaged in or within the vicinity of the cutting process must wear appropriate eye, respiratory, hand and ear protection.

Wear **eye protection** conforming to **BS EN 166** [we recommend the use of a face shield with high energy impact protection **mechanical strength A**]. As well as eye protection, a face mask will protect the face from soft tissue injury. Additional safety spectacles or prescription glasses can be worn under a face mask.

Barracuda Brick Slip Support System - Health & Safety Guidance and COSHH [Control of Substances Hazardous to Health] – continued:

Wear **respiratory protection** [a mask] conforming to **BS EN 149** [we recommend the use of a mask with a minimum rating **FFP3**]

Wear **hand protection** [gloves] conforming to **BS EN 388**. Gloves conforming to BS EN 388 are rated for; abrasion resistance, cut resistance, tear resistance and puncture resistance. These characteristics are scored with a number 1 to 4 [1 to 5 for cut resistance]. The higher the number the more resistant the gloves are to that particular hazard [we recommend that you wear gloves with a **rating of 3 or above**].

Wear **ear protection** conforming to **BS EN 352**. The effectiveness of the ear protection required will depend upon the noise level caused by the cutting process. Different cutting processes/techniques will cause potentially, different noise levels. Hearing protection must be provided and worn when noise levels are in the range of 80dB to 85dB. 87dB is the maximum exposure limit [we recommend that; regardless of how short the duration of the cutting process, and the noise levels caused by it, as a minimum, **ear plugs should be worn conforming to BS EN 352 – 2**].

Although the Barracuda system, in its supplied form, does not contain substances that are known to be hazardous to health, other materials associated with the brick slip façade installation almost certainly will. Particular potential hazards to be aware of are those associated with; cutting bricks, mixing and use of mortar.

Cutting Bricks

This process, if carried out dry, will produce a considerable amount of dust. This dust will, almost certainly, contain significant amounts of Crystalline Quartz Silica [up to approximately 30%]. In fine dust form this is respirable and can cause Silicosis. The workplace exposure limit [WEL] for respirable silica is 0.1mg/m³. It is difficult to accurately establish somebodies' actual exposure without detailed analysis so If possible, always try and cut bricks using a 'wet' saw. Small, bench or stand mounted wet saws are readily available and their correct use will almost entirely eradicate the dust that the cutting process would otherwise produce if carried out dry. Always consult and conform with the Health & Safety and COSHH guidance provided by your brick manufacturer and wear all personal protective equipment recommended by your brick manufacturer. When cutting bricks, regardless of whether a wet or dry cutting method is used but especially when, in exceptional circumstances, a brick is cut 'dry', always wear **respiratory protection** [a mask] conforming to **BS EN 149** [we recommend the use of a mask with a minimum rating **FFP3**].

Mixing and use of Mortar

The particular, most typical risks associated with the mixing and use of mortar result from; **Inhalation**, **eye contact** and **skin contact**. Always consult and conform with the Health & Safety and COSHH guidance provided by your mortar manufacturer and wear all personal protective equipment recommended by your mortar manufacturer.

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Repeated inhalation of dust from dry blended cementitious products increases the risk of developing lung diseases. When handling, opening or mixing bagged mortar always wear **respiratory protection** [a mask] conforming to **BS EN 149** [we recommend the use of a mask with a minimum rating **FFP3**].

Eye contact with blended cementitious products [wet or dry] may cause serious injury. Wear **eye protection** conforming to **BS EN 166** [we recommend the use of safety goggles rather than safety spectacles].

Skin contact with blended cementitious products [wet or dry] may cause irritation. Prolonged skin contact with wet blended cementitious products can cause burns. Wear long sleeved clothing and take care not to kneel in mortar deposits. Burns can develop painlessly through absorbent clothing. Wear **hand protection** [gloves] conforming to **BS EN 388**. Wear gloves/gauntlets that are abrasion, cut, tear and puncture resistant and that are waterproof and alkali resistant. These are typically 'Nitrile' coated.

Should further advice or guidance be required please contact James & Taylor Ltd.