

MECD – Safety Innovation

MECD Innovation – Auto Braked Panel Trolley



Where:
Manchester Engineering Campus Development.

Who:
Balfour Beatty - Astins



Eight-Wheeler – Partition and glazing transport trolley

The “Auto Brake Panel Trolley”, designed and trialled at the MECD Project is made to allow for the safe movement of products and components.

Particularly flat panels such as plaster boards, wall panels, glass panels and materials around the construction site from the loading bay to the work area.

The Auto Brake Panel Trolley works on the principle of “brakes applied and on” when stationary allowing for the safe and secure movement of materials prior to assembly on site. To unlock the brake system a brake lever handle is pulled upwards to disengage the braked wheels giving full control of the trolley prior to it being moved.

The trolley has a load capacity of 1000kg and has the facility to strap and tie down the load whilst in transit making for more safe movement around site. This is a huge benefit to what was previously being used on site as any materials on the “Normal trolley” were not strapped down and have previously fallen off when going around corners or uneven ground.

The trolley has a unique under carriage and wheel alignment system that reduces the risk of the trolley and loading tipping over by facilitating the load carried to be

shard across a range of seven wheels located on the undercarriage chassis. The undercarriage wheel system also allows the operator to lock the centre wheel in a fixed forward and parallel position thus removing the “Crab” effect of the trolley on any slope encountered.

This trolley has been a major benefit to the employees on site using it and a much-preferred option to the standard “No handled push along trolleys”.

The benefit over using the mechanical push along trolley over powered trolleys is its compact nature allowing it to be transported in goods hoists with ease.

Industry Wide Innovation Application

We believe this safety innovation, which was developed specifically for and trialled on the MECD project can be used and implemented across the industry.

The trolley was designed in collaboration with Astins and their equipment supplier. It will be available for all other contractors across the industry.

The 8 wheeled design is thought to be one of a kind and offers greater mobility in enclosed building spaces. It is also more stable and offers greater security whilst transporting materials. The handle is also ergonomically designed and adjustable, protecting the operatives welfare.