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BUILDCON2023

COMPILATION OF PROJECT INNOVATION IDEAS
SEMESTER MARCH – AUGUST 2023

EMBRACING SMART CONSTRUCTION TRANSFORMATION

BUILDERS' CONVENTION DAY 2023

Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch

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Organised by
Department of Built Environment Studies and Technology
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UNISCAFF STAIRFOLD

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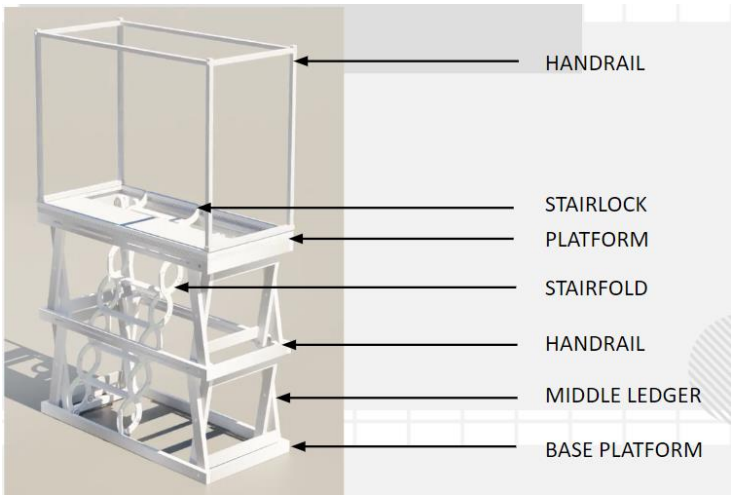

Uniscaff Stairfold

Innovation Idea:

This research project explores the pivotal role of scaffolding in the construction industry, with a particular focus on its challenges, safety considerations, components, and recent technological advancements. The study underscores the paramount importance of adhering to safety regulations and guidelines to ensure the well-being of workers and prevent accidents. Emphasising the significance of regular inspections, maintenance, and proper training for workers, the research aims to uphold the integrity of scaffolding structures. In addition to addressing common issues related to scaffolding, the study delves into innovative solutions, with a notable highlight on the Uniscaff Stairfold concept. This revolutionary system incorporates folding mechanisms, attachable components, and modular designs, significantly enhancing efficiency and convenience in staircase scaffolding. The Uniscaff Stairfold concept represents a ground-breaking advancement in scaffolding technology, offering convenience, flexibility, and safety to construction projects. Furthermore, the research explores technological advancements that have impacted scaffolding practices. It investigates digital solutions like SketchUp software and computer simulations, which have improved scaffolding design and planning accuracy. The integration of drones and robotics for inspecting and maintaining scaffolding structures is also examined, reducing human risks in high-risk areas. The findings of this research provide construction professionals and stakeholders with valuable insights to make informed decisions and implement best practices in scaffolding operations. By addressing challenges, embracing innovative solutions, and leveraging technological advancements, the study contributes to the continuous improvement of scaffolding practices, ultimately promoting safer and more efficient construction sites. Overall, this research underscores the importance of ongoing efforts to enhance safety measures and embrace cutting-edge technologies to create a safer and more productive construction industry.

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