

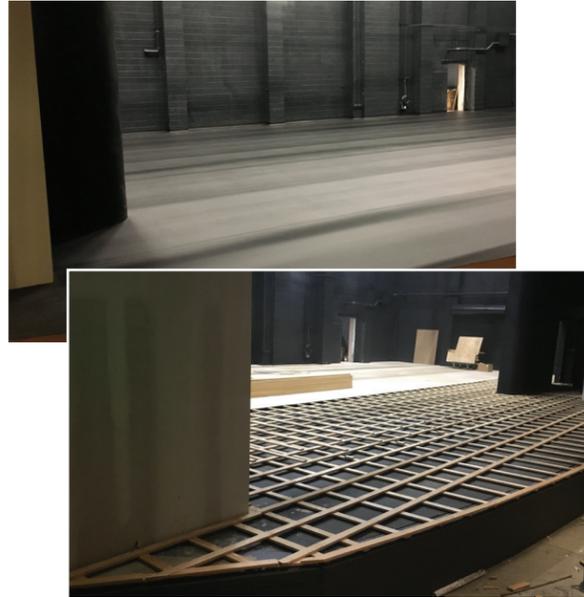
# Building Stage Floors – Refurbishment, Rebuild, and New Construction

Backed by an engineering team and independent research, Harlequin Floors brings more than 40 years' experience specializing in stages and floors for the performing arts. Harlequin works on major stage refurbishments from installing a new top surface to constructing a complete new stage.

Stage floors are integral to performance spaces. Venue owners and theater consultants are demanding more than a safe and versatile performance surface. Integration with stage engineering, architectural integrity, and even contributing to the acoustic environment of the space can be factors that set high specification standards.

Stages not only need to be load-bearing for performers, scenery, props and trucks, they need to be hard-wearing – throughout move in, breakdown, and rigging - show after show. The floor surface should provide a safe working environment not just for performers but also for technical teams.

Harlequin combines traditional floor construction skills using natural materials and advances in engineered floor products and plastics components to meet the most demanding stage specifications. Whether working with an architect's design or a venue's in-house technical crew, Harlequin's skilled teams are experienced in stage and floor construction and deliver the finished stage on time and on budget.



Kennesaw State University stage floor project featuring Harlequin WoodSpring and Harlequin Cascade.

## Harlequin Liberty Switch®

Harlequin Liberty Switch is a professional multi-use floor system which transforms between a rigid theatrical floor and a sprung performance floor at the touch of a button.

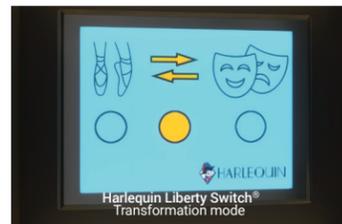
It is designed for venues that regularly put on both dance and theatrical performances and so require both a sprung and rigid floor in the same performance or rehearsal space.



US Patent 11,649,646



Harlequin Liberty Switch®  
Professional load-bearing theatre floor



Harlequin Liberty Switch®  
Transformation mode



Harlequin Liberty Switch®  
Professional sprung dance floor



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The Company reserves the right to make any variation in design or construction of the material described.  
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SYDNEY  
HONG KONG  
TOKYO



## Sprung Performance Floors Permanent and Portable



Photo credit: Sam Houston State University by Jared Doster



Photo credit: Ema Peter



Photo credit: Boston Ballet by G. Schiavone



Jacob's Pillow Dance Festival



Photo credit: Birmingham Hippodrome



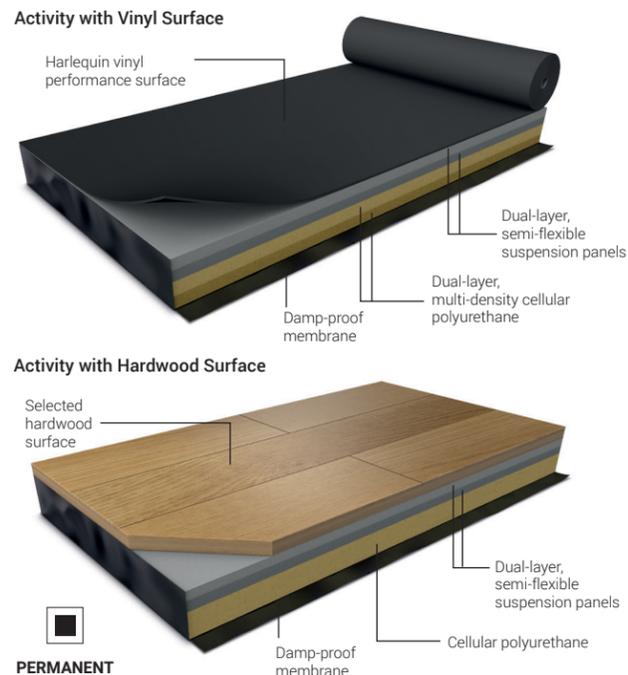
Photo credit: Walnut Hill School for the Arts

## Harlequin Activity®

**Harlequin Activity®** is a permanently installed sprung floor system, based on the well-established 'triple sandwich' construction originated by Harlequin over 40 years ago. It is a fully floating system with no fixings to the sub-floor and can be laid on any reasonably smooth and flat surface without prior preparation. Harlequin Activity is shock-damped to avoid a 'trampoline' effect and provides area and point elasticity to offer identical characteristics across the whole floor. An 'industry-standard' choice, when correctly reinforced, that can withstand heavy loading including retractable seating.

**Performance Surface:** Harlequin Activity can be installed with a Harlequin vinyl performance surface for all types of dance. A hardwood surface is available for specifiers who need a surface for multi-purpose use, including traffic by the general public, full stage entertainment, ballroom dance, or when required to match existing decor.

**Installation:** Harlequin Activity must be installed through Harlequin's contracts division and each custom installation is backed by a Harlequin guarantee.

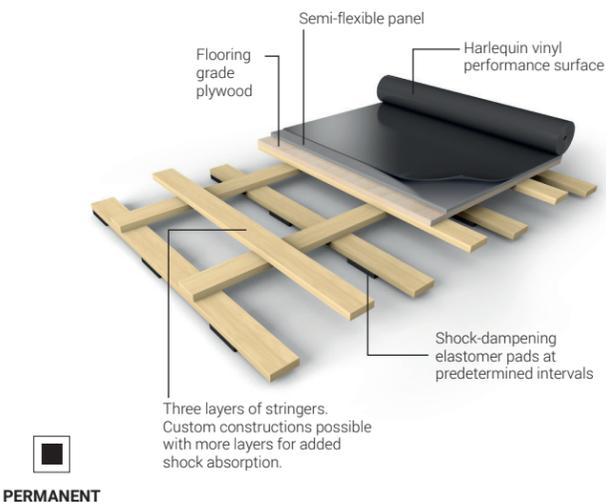


## Harlequin WoodSpring®

**Harlequin WoodSpring®** is a permanently installed sprung floor system that is a modern interpretation of the traditional 'basket weave,' which originated in the 19th century. WoodSpring blends a traditional construction approach with the technology of today's materials. The "spring" in basket weave construction comes from the natural flexing and recovery of the triple layer of battens, which is enhanced by shock-absorbent elastomer pads. Harlequin WoodSpring is comprised of a triple layer of wooden bearers laid at right angles to one another onto shock-absorbent elastomer pads attached to the underside of the bottom layer. The bearers are then covered with either a Harlequin vinyl performance surface or solid hardwood. The selection of lumber, batten and pad spacing, insulation, and installation are proprietary to Harlequin Floors and critical to long-term performance.

**Performance Surface:** Harlequin WoodSpring is finished by choosing an appropriate Harlequin vinyl or engineered hardwood performance surface.

**Installation:** Designed for permanent installation Harlequin WoodSpring must be installed through Harlequin's contracts division and each custom installation is backed by a Harlequin guarantee.

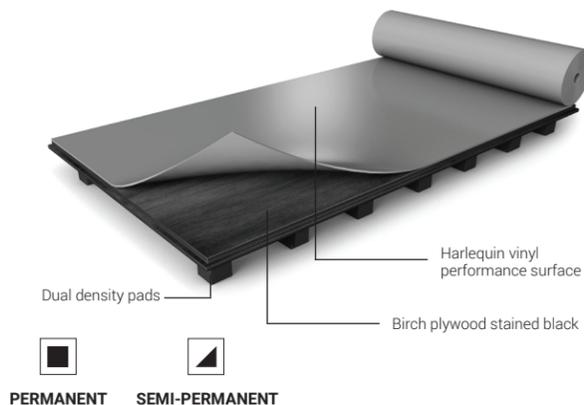


## Harlequin Flexity™

**Harlequin Flexity™** is a cost-effective sprung floor panel system, designed for permanent or semi-permanent installation. Panels are laid in a brickwork fashion onto the sub-floor so that cross joints do not coincide. The panels are joined together by a special tongue and groove, which are glued together for permanent installation or fixed using woodscrews at predetermined points along the tongue and groove for a semi-permanent solution.

**Performance Surface:** Harlequin Flexity is finished by choosing an appropriate Harlequin vinyl or engineered hardwood performance surface.

**Installation:** Harlequin Flexity can be installed by anyone with carpentry skills and full instructions are provided. It's a cost-effective choice, helping to reduce the injury risks associated with dancing or performing on a hard, unsprung floor.



Floor Panel Size 42"x87"

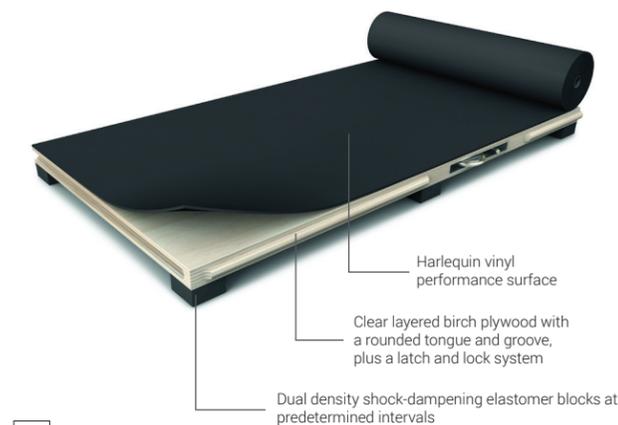
## Harlequin Liberty® LatchLoc

**Harlequin Liberty® LatchLoc** is a modular, sprung floor panel system, manufactured from engineered board with dual-density elastomer blocks on the underside to give uniform and consistent shock damping. The panels are laid in a brickwork fashion onto the sub-floor, so that cross joints do not coincide. They are linked to each other by a hardwood dowel, which is secured into place using our 'one turn of the key' latch and lock mechanism. Solid curbs and ramps are available for stage and studio wall extensions. Harlequin Liberty LatchLoc stage panels have tempered hardboards for sliding and protecting elastomer blocks. Storage on carts offers ease and safety for stage crews during tours and venue setup.

**Performance Surface:** Harlequin Liberty LatchLoc is finished by choosing an appropriate Harlequin vinyl performance surface.

**Installation:** Harlequin Liberty LatchLoc sprung floor panels are quick and easy to install. The panels and accompanying portable Harlequin vinyl performance surface can also be stored on carts, providing an easy and safe way for crews to move them while on tour or around a venue.

Full Size Panel 96"x48"  
Half Size Panel 48"x48"



PORTABLE

## Harlequin Liberty® HD

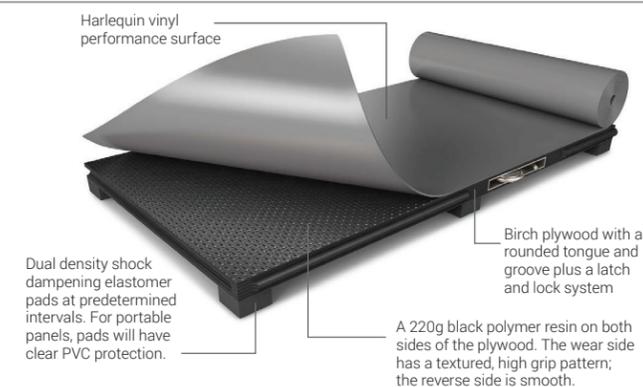
**Harlequin Liberty® HD** a further development of our renowned Liberty panel system, is designed with enhanced durability in mind for more challenging environments. Panels are laid in a brickwork fashion onto the sub-floor so that cross joints do not coincide. The panels join together by a rounded tongue and groove and are secured using our 'one turn of the key' latch and lock mechanism. Harlequin Liberty HD panels have black polymer resin overlays on both sides with a textured, water-resistant, anti-slip, and weatherproof top surface. They can be stored on carts for easy and safe transportation on tour or within a venue.

**Performance Surface:** Harlequin Liberty HD is finished by choosing an appropriate Harlequin vinyl performance surface.

**Installation:** For permanent and semi-permanent use, installation can be carried out either by the customer or by our highly-skilled technical team.

Full Size Panel 96"x48"  
Half Size Panel 48"x48"

\* Harlequin Liberty HD stage panels available by special order; recommended for indoor use only.



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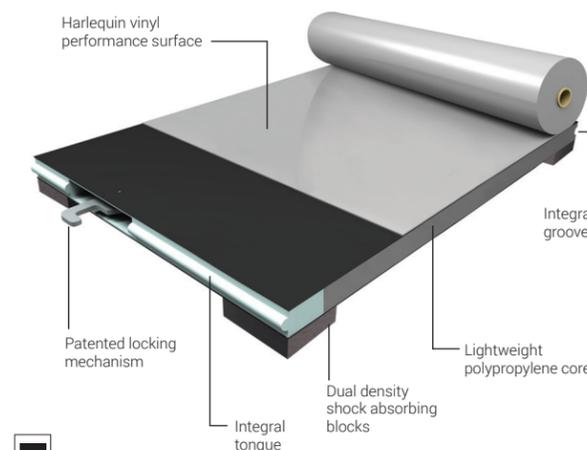
## Harlequin AeroDeck®

**Harlequin AeroDeck®** is an ultralight, water-resistant modular sprung floor panel system manufactured from engineered panels with elastomer blocks that are located at regular intervals on the underside. Blocks provide added shock absorption and uniform suspension to eliminate hard spots. Panels are laid in a brickwork fashion onto the sub-floor, so that cross joints do not coincide. They are linked to each other by a radiused tongue and groove pivot joint and secured by a unique locking system, which removes the need to fix the panels mechanically to the sub-floor.

**Performance Surface:** Harlequin AeroDeck is finished by choosing an appropriate Harlequin vinyl performance surface.

**Installation:** Harlequin AeroDeck is quick and simple to install. The portable panels have flexibility for reconfiguration and are light to carry due to an advanced internal structure inspired by aerospace technology. The core construction of the panel is unaffected by moisture therefore the system is suitable for use in outdoor productions.

Full Size Panel 96"x48"  
Half Size Panel 48"x48"



PORTABLE

**Harlequin Sprung Performance Floors are finished with an appropriate Harlequin Vinyl Performance Surface or Hardwood Surface. View our range of surfaces at [harlequinfloors.com](http://harlequinfloors.com).**