# HARLEQUIN ACTIVITY® SPRUNG FLOOR

HARLEQUIN ACTIVITY® is a permanently installed sprung floor system based on the now well-established triple sandwich construction originated by Harlequin over 20 years ago. It is a fully-floating system with no fixings to the sub-floor and can be laid on almost any reasonably smooth and flat surface without preparation. The construction of HARLEQUIN ACTIVITY® is shock-damped to avoid a "trampoline" effect and provides area elasticity to offer identical characteristics across the whole floor. Correctly reinforced according to the manufacturer's instructions, Activity® can withstand heavy loading including retractable seating.

### HARLEQUIN ACTIVITY® can be installed with a choice of surfaces:

- HARLEQUIN VINYL SURFACE: for all types of dance, including classical ballet.
- HARDWOOD SURFACE: for specifiers who need a hardwood surface for multi-purpose use, including traffic by the general public, full stage entertainment, ballroom dance or even for designers obliged to match existing decor.

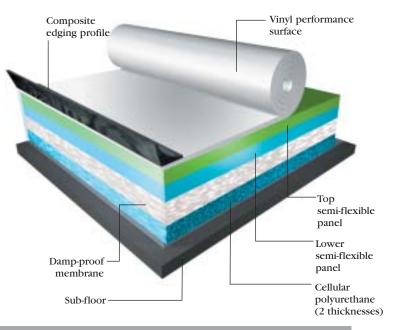
HARLEQUIN ACTIVITY® FLOOR is only available for installation by HARLEQUIN'S Contracts Division or by approved installers under the supervision of one of our trained technicians.

# ACTIVITY® WITH HARLEQUIN VINYL SURFACE

We start by installing a polymer damp-proof membrane and over this place two layers of special density cellular polyurethane. Next, two layers of semiflexible panels are laid at right angles to one another and staggered so that the joins do not coincide. The top layer of panels is bonded to the one below with a non-setting adhesive and fastened mechanically.

The damp-proof membrane is folded onto the surface and secured to form a damp-proof seal. Then the selected Harlequin vinyl performance surface is installed and adhered. The seams are welded to form an unbroken surface. Finally, the gap between the flooring and the wall is filled with a composite skirting profile to form a flexible seal to the wall.

# HARLEQUIN ACTIVITY® FLOOR WITH HARLEQUIN VINYL SURFACE





Harlequin Activity® Floor with Cascade surface at National Dance Institute - Santa Fe. NM.



Custom design by Harlequin Contracts Division provided support for retractable seating

### ACTIVITY® WITH HARDWOOD SURFACE

The construction is similar to Activity® with a Harlequin vinyl surface, except it uses one layer of cellular polyurethane foam. A selected hardwood surface layer tops the floor system. This is installed with the use of a modified PVA adhesive and secretly secured through the tongues using lost-head nails. The hardwood surface is protected by impregnation with a multi-coat hardwearing polymer lacquer. The expansion gap around the perimeter of the room can be concealed by a scotia profile of matching hardwood to form a neat edging.

# **SPECIFICATIONS**

**Laying time:** A floor of 120-180 yd<sup>2</sup>

(100-150 m²) can generally

be installed in 5 days

**Maximum** 1380 lbs/yd² (750 kg/m²)

distributed load:

**Maximum** 500 lbs/yd² (275 kg/m²)

dynamic load:

### ACTIVITY® WITH VINYL SURFACE

Overall thickness: 2" (50mm)

depending on vinyl surface specified (see p. 7-8)

**Weight:** 37-46 lbs/yd² (20-25 kg/m²)

depending on surface

specification

### ACTIVITY® WITH HARDWOOD SURFACE

Overall thickness: 2 1/4" nominal (57mm)

**Description** 1/2" (13mm) - 3/4" (19mm)

of board: hardwood

**Weight:** 47-50 lbs/yd² (17-19 kg/m²)

depending on hardwood

surface chosen

Long life

Easy maintenance

Tolerates uneven subfloors

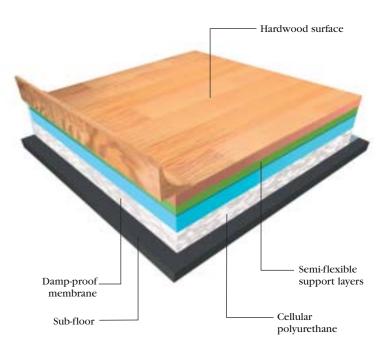
Acoustic insulation

No "trampoline" effect

All types of dance

**Quickly installed** 

### HARLEQUIN ACTIVITY® FLOOR WITH HARDWOOD SURFACE





Preparing base for hardwood surface



Harlequin Activity® floor with hardwood surface on board Crystal Cruise Line's "Crystal Serenity"

# HARLEQUIN LIBERTY™ SPRUNG FLOOR

In two versions for either portable or permanent installation.

Harlequin Liberty<sup>TM</sup> is a modular floor manufactured from engineered boards with closed cell elastomer blocks on the underside to give uniform and consistent shock damping. The panels are laid brickwork fashion on the sub-floor so that cross-joins do not coincide. They are linked to each other by a radiussed pivot joint.

This pivot joint extends along the panel edges to within 13/16" of the corners ensuring the corners are protected from flexion under load. The edges are also carefully supported by elastomer blocks.

The unique feature of the blocks is their "dual Durometer" (a sandwich of 2 levels of hardness tested by the Shore Durometer Test). This provides progressive compression under light and heavy loads providing the same "feel" and energy return to one or several dancers on the same panel.

The blend of the pivot joint and the special blocks make the transition from one panel to another imperceptible, which is of paramount importance to performers.

# **SPECIFICATIONS**

**Dimensions:** Full size panel 96" x 48"

(2.42m x 1.21m)

Half size panel 48" x 48"

 $(1.21m \times 1.21m)$ 

Weight: Permanent panels 83 lbs

(37 kg); portable panels

93 lbs (42 kg)

**Installed thickness:** Permanent panels 1<sup>1</sup>/<sub>2</sub>"

(38mm); portable panels 15/8" (42mm) plus the

Harlequin floor (see p. 7-8)

**Installation time:** Permanent panels approx.

120 sq.yd. (100 sq.m.) per

day with 2 persons

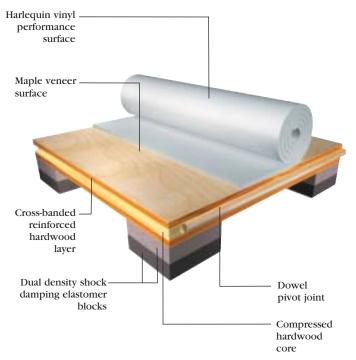
Portable panels approx. 60 sq.yd. (50 sq.m.) per hour

with 2 persons

**Maximum** 1000 lbs (454 kg) static distributed load: 500 lbs (227 kg) dynamic



# HARLEQUIN LIBERTY™ PERMANENT SPRUNG FLOOR PANELS



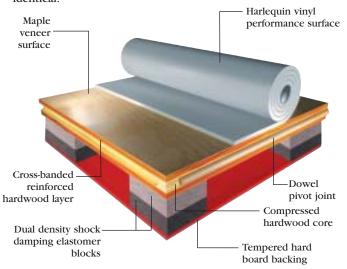
### PORTABLE STAGE VERSION

Harlequin Liberty<sup>TM</sup> portable stage panels are intended for touring companies and venues where the hard resident floor requires occasionally to be covered with a sprung floor

### A tempered hard board is attached to the underside of the portable stage panels to:

- •ease sliding of the panels into position
- •protect the elastomer blocks
- •allow the panels to be stored more readily

In all other respects the construction of both versions is identical.



# INSTALLATION OF LIBERTY™ PORTABLE PANELS Panels fit together easily Tight fitting joints Merce Cunningham dancers on Harlequin Liberty™ Stage Panels (Photo by Chris Gale)

### PANEL STORAGE CART

HARLEQUIN Panel Storage Carts are designed to protect the Liberty<sup>TM</sup> panels and provide an easy and safe way of moving them from place to place, whether from stage to scenery dock or on and off trucks when touring.

Sturdily made of black scratch-resistant powder-coated steel, each cart is mounted on 4 swivel wheels with non-marking rims, the corner wheels having brakes.

Each cart has a capacity of 20 full size Harlequin Liberty<sup>TM</sup> portable panels, with half size panels being loaded side by side. In addition, there are 2 fork pockets under the cart to enable a fully-loaded cart to be handled by fork lift truck and the frame of the cart can readily be secured by straps for road transport.



- Ultra-fast installation
- Re-configurable (even permanent panels)
- Long life
- **Easy maintenance**
- No "trampoline" effect
- All types of dance
- Low profile (for limited headroom)

# HARLEQUIN WOODSPRING™

HARLEQUIN WOODSPRING™ BASKETWEAVE draws on concepts dating back to the 19th Century. Our modern interpretation blends a traditional construction approach with the technology of today's materials. The "spring" in basketweave construction comes from the natural flexing and recovery of the triple layer of battens (see diagram), which is enhanced by shock-absorbent elastomer pads.

Acoustical and thermal insulation are ensured by the placement of fiberglass insulation into the construction (this option not shown in our diagram).

The selection of lumber, batten and pad spacing, insulation and installation are proprietary to Harlequin and critical to long-term performance. Harlequin's tried and tested design has established the corporation's unrivaled reputation in this specialized area. Each custom installation is backed by the Harlequin warranty.

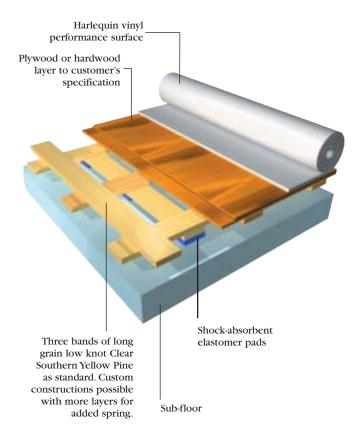
HARLEQUIN Woodspring™ BASKETWEAVE is only available for installation by HARLEQUIN'S Contracts Division or by approved installers under the supervision of one of our trained technicians.



Installation of Harlequin Woodspring™ Basketweave at the Boston Ballet School



# TYPICAL CROSS-SECTION OF HARLEQUIN WOODSPRING™ BASKETWEAVE FLOOR



## **SPECIFICATIONS**

Finish: Harlequin vinyl dance

surface or hardwood

Top panel\*

**sub-surface:** 3/8" moisture resistant

load distribution panels

Lower panel\*

**sub-surface:** 1/2" flooring grade

plywood

**Basketweave:** 3 layers each of 1 x 3

stringers

**Shock-absorbent** 1/2" thick, proprietary

elastomer pads: density

\*Optional tongue and groove pine flooring available in place of top and lower panels

in place of top and lower panels

Note: Ask about our custom design Woodspring™ floors.

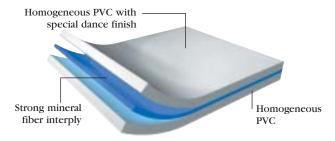
# HARLEQUIN PERFORMANCE SURFACES

### HARLEQUIN CASCADE™

The ultimate heavy-duty dance surface. Its silky smooth finish is perfectly suited for ballet, modern, tap and jazz. SPECIFICATIONS

**Thickness:** 0.080" (2mm) **Roll length:** 98' (30m) max **Roll width:** 78" (2m)

**Weight:** 4.8 lbs/yd² (2.6 kg/m²)



### HARLEQUIN FIESTA™

With its elegant wood design protected by a hard-wearing surface Fiesta is perfect for percussive and social dance in studios or halls where public access is likely in street footwear.

### **SPECIFICATIONS**

 Thickness:
 0.080" (2mm)

 Roll length:
 75' (23m)

 Roll width:
 78" (2m)

Oakstrip design printed film Stable impregnated polyester backing

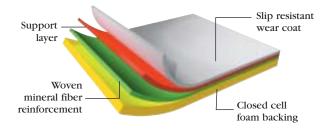
### HARLEOUIN STUDIO™

A special padded floor for dance, studio and stage use. Its lightweight closed cell foam backing provides extra cushioning. Widely used for most types of dance.

### **SPECIFICATIONS**

**Thickness:** 0.120" (3mm) **Roll length:** 98' (30m) max **Roll width:** 59" (1.5m)

**Weight:** 4.8 lbs/yd<sup>2</sup> (2.6 kg/m<sup>2</sup>)



### HARLEOUIN STUDIO B™

A padded dance floor specifically engineered for modern dancers. Also used for ballet.

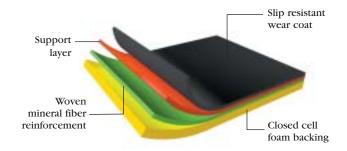
### **SPECIFICATIONS**

 Thickness:
 0.120" (3mm)

 Roll Length:
 98' (30m) max

 Roll Width:
 59" (1.5m)

**Weight:** 4.8 lbs/yd² (2.6 kg/m²)



### HARLEQUIN ALLEGRO™

The thickest vinyl dance floor surface in the world, significantly reducing fatigue and impact injury. Allegro is a safe choice for dance schools and public education.

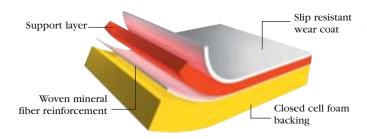
### **SPECIFICATIONS**

Thickness: 0.340" (8.7mm)

Roll length: 82' (25m) max

Roll width: 59" (1.5m)

**Weight:** 11.6 lbs/yd² (6.3 kg/m²)



### HARLEQUIN TEMPO™

This floor is particularly suited to the requirements of contemporary or barefoot dance. Thicker than Harlequin Studio, Tempo gives extra protection against hard subfloors and has a soil-resistant surface.

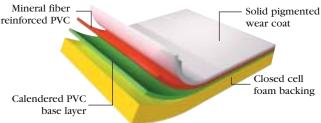
### **SPECIFICATIONS**

 Thickness:
 0.150" (3.7mm)

 Roll length:
 98' (30m) max

 Roll Width:
 78" (2m)

**Weight:** 5.8 lbs/yd<sup>2</sup> (3.13 kg/m<sup>2</sup>)



# HARLEQUIN PERFORMANCE SURFACES

### HARLEQUIN REVERSIBLE™

The original and classic double-sided floor to be used as an excellent general purpose roll-out overlay for studios and stages with a different color on the reverse. There are 7 combinations. Suits all types of dance.

### **SPECIFICATIONS**

**Thickness:** 0.050" (1.3mm) **Roll length:** 98' (30m) max **Roll width:** 78" (2m)

**Weight:** 4.2 lbs/yd<sup>2</sup> (2.3 kg/m<sup>2</sup>)



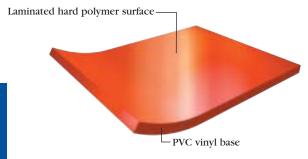
### HARLEQUIN HI-SHINE™

Dazzling wet-look floor for stage runway and professional studio shots.

### **SPECIFICATIONS**

**Thickness:** 0.06" (1.5mm) **Roll length:** 65.6' (20m) max **Roll width:** 59" (1.5m)

**Weight:** 3.6 lbs/yd<sup>2</sup> (1.96 kg/m<sup>2</sup>)



### HARLEQUIN STANDFAST™

The thickest sheet vinyl available for the heavy duty rigors of stage and touring. For all dance.

### **SPECIFICATIONS**

Thickness: 0.120" (3mm)

Roll Length: 49' (15m)

Roll Width: 78" (2m)

**Weight:** 7.32 lbs/yd<sup>2</sup> (3.98 kg/m<sup>2</sup>)

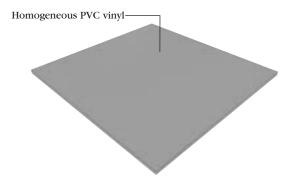


### HARLEQUIN TAP/TV TILES™

Accurately cut dead square. They lay flat and stay flat. SPECIFICATIONS

**Tile size:** 36" x 36" **Thickness:** 0.120" (3mm)

Weight: 10.12 lbs per tile (4.6kg per tile)



# **TAPES**

We offer a comprehensive range of single and double-sided tapes for use with Harlequin floors in all portable and semi-permanent situations.

SPECIFICATIONS			
Tape type	Width	Roll length	Roll weight
Single-sided clear pvc	2" (50mm)	108'2" (33m)	11.3 oz (320g)
Single-sided cloth gaffer tape, black and other colors to match our vinyl dance floors	2" (50mm)	164' (50m)	1.87 lbs (850g)
Double-sided high-tack/low-tack	2" (50mm)	75'(22.9mm)	1.58 lbs (720g)



# ROLL STORAGE CARTS

The Harlequin Roll Storage Cart is constructed of black scratch-resistant powder-coated steel and measures just over 87" in length for the 2 meter size cart, and weighs 430 lbs empty.

It is well balanced on 4 vinyl non-marking rim wheels with locks at both rear wheel sites.

The supporting poles are 84" long and will hold rolls up to 14" in diameter.

The width of the cart is 43" and the height varies from 44" to 57" (if the handle is in the storage position). The heavy gauge poles have protective end caps to "lock" the floor roll in place and to protect the ends of the rolls thereby safeguarding the seams of the floor.

A 4 roll Restricted Access Harlequin Roll Storage Cart is also available when the cart is required to go through a single door or archway. This smaller cart retains all the features of the larger cart, but is only 34" wide.



# **SPECIFICATIONS**

### ■1.5 METER 6-ROLL STORAGE CART

Roll Capacity: 6 rolls
Overall length: 68"
Overall width: 43 1/4"
Overall height: 44 3/4"

(57"with handle in the storage position)

(Pole length 64 1/4")

Max. roll diameter: 14 1/2" Empty weight: 400 lbs

### 2 METER 6-ROLL STORAGE CART

Roll Capacity: 6 rolls

Overall length: 87 3/4"

Overall width: 43 1/4"

Overall height: 44 3/4"

(57"with handle in the storage position)

(Pole length 84")

Max. roll diameter: 14 1/2" Empty weight: 430 lbs

### 2 METER 4-ROLL STORAGE CART

Roll Capacity: 4 rolls
Overall length: 87 3/4"
Overall width: 34 1/2"
Overall height: 40"
(57"with handle in the storage position)

(Pole length 84")

Max. roll diameter: 15 3/4" Empty weight: 340 lbs

(Limited Access)

### INTRODUCING HARLEQUIN ROLL STORAGE CARTS

Since the introduction of the Liberty<sup>TM</sup> Stage panels and the stage panel storage cart in 1998, we have received numerous requests for a roll storage cart for Harlequin vinyl flooring.



4 roll limited access cart



support pole with grip



detail of pole end cap