



# **COSWICK HARDWOOD INC.**

Coswick Hardwood Inc. is a Canadian hardwood flooring manufacturer. The company head office is located in Mississauga, Ontario, Canada. The manufacturing facilities are located in Zaslavl, Belarus.

Coswick manufactures a full range of floor coverings made of natural wood. Production program of the company includes:

- traditional plank hardwood flooring;
- mosaic flooring;
- wall panels;
- spotrs and events flooring.

Coswick line of sports hardwood floors provides excellent flooring solutions for a wide range of public and sports interiors, including:

**Indoor sports courts** used for training and competitions of all types, including international tournaments and team sports such as basketball, volleyball, handball, squash etc.

**All types of gyms and interiors** used for fitness and physical activity, including training in team sports.

**Fitness centers**, yoga and aerobics studios, dance halls and choreographic studios.

**Temporary floor covering solutions** for holding sports-dance competitions, exhibits, presentations and other public events.

Coswick sports flooring is designed in full compliance with the norms and standards of sports flooring manufacturing (European Standard EN14904, German DIN 18032-2, American ASTM F2772) and ensures safety, comfort and effectiveness during training and sports competitions of all types.

# **COSWICK SPORTS FLOORS – TRADITION MEETS INNOVATION**



COSWICK SPORTS FLOORS ARE MANUFACTURED FROM NATURAL WOOD AND DESIGNED ACCORDING TO THE LATEST BIOMETRIC STANDARDS.

IN ADDITION TO HIGH-END APPEARANCE, COSWICK SPORTS FLOORS HELP ENSURE COMFORT, SAFETY, AND EFFICIENCY FOR CONDUCTING TRAINING AND COMPETITIONS IN ACCORDANCE WITH INTERNATIONAL REQUIREMENTS FOR SPORTS FLOORING PLATFORMS. DESIGNED WITH CARE FOR ATHLETES' JOINTS AND LIGAMENTS, COSWICK SPORTS FLOORS HAVE THE HIGHEST FUNCTIONAL CHARACTERISTICS AND ARE FULLY SUITABLE FOR PROFESSIONAL SPORTS ARENAS WORLDWIDE.











## **WOOD - THE BEST MATERIAL FOR SPORTS**

A floor covering is the one of the key elements of any sports complex, and it is essential that it meets the strictest requirements of any event that will be held there. Despite the wide variety of available sports surfaces, traditional wood sports floors continue to top the ranks as the highest quality solution. There are several reasons for this:

**First**, innovations in the area of wood flooring design and production make it possible to leverage elastic and damping properties of natural wood. From the anatomical perspective, this meets the ideal parameters for contact between an athlete's body and the flooring surface.

**Second**, unlike most synthetic surfaces, natural wood does not emit harmful VOCs, does not degrade, cause allergies, or accumulate electrostatic charge.

**Third**, hardwood flooring adds a warm and inviting atmosphere to multipurpose interiors, which increases the comfort of athletes and fans alike. This especially applicable to spaces where dance, fitness and aerobics classes, as well as high-profile competitions are regularly held.

**Fourth**, wood floors have a long service life, and are easy repair and maintain, while their installation does not harm the environment.

## **INDUSTRY STANDARDS**

Coswick develops and tests its sports floors in accordance with the requirements of the integrated European standard EN 14904 and German standard DIN 18032-2.

The most significant parameters of these standards include:

### 1. Shock absorption



Shown as a percentage, shock absorption represents the extent, to which a sports floor covering is able to soften an athlete's landing, as compared to an inflexible surface (e.g., concrete slab). The best types of sports floors are required reduce the impact by 55 to 75%. This is the optimal range that ensures athletes' comfort without compromising speed or performance.

### 2. Vertical ball bounce



This indicator is required for games and activities that involve a bouncing ball. The test compares the bounce ball measure of a fully inflated basketball to the bounce from a concrete surface. The resulting indicator must be at least 90% of the bounce from concrete.

#### 3. Vertical deformation



Deformation of a flooring surface following dynamic impact of 1500 N. This indicator is measured in conjunction with shock absorption, and its optimal range is 2.3mm to 5 mm.

#### 4. Resistance to rolling loads



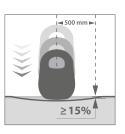
Operational factor that indicates the suitability of the flooring surface for enduring heavy carts with rubber wheels that are frequently used to move various sports equipment. The tests are carried out with a load of 1500 N (153 kg).

#### 5. Friction



This factor measures resistance to sliding upon impact of clean athletic shoes on a dry flooring surface. The test uses a special pendulum device, and requirement measurement needs to fall within 80 and 110 range. A lower result indicates that the floor it too slippery, while a higher suggests that athletes' will "stick" to the floor, limiting their range of movement. Surface friction impacts athlete's ability to move along a complex trajectory.

#### 6. Deformation of surface finish



This factor measures the spread of deformation of the surface finish that might occur as a result of dynamic impact. Acceptable deformation is within 500mm from point of impact, 15% of total deformation at the point of impact. This indicator is standardized to ensure that any impact that an athlete has on the flooring surface does not distort ball bounce or trajectory.

# **PROFESSIONAL SPORTS**













MATRIX SPORT Coswick line of hardwood floors for professional sports platforms include four types of constructions: Tournament Pro Sport, Tournament Sport, Tournament Euro Sport, and Matrix Sport.

All Coswick sports floors of the tournament series correspond to the highest class A4 standard, according to EN 14904.

Tournament Pro Sport and Tournament Sport are manufactured using time-tested technologies, combining solid hardwood flooring with rubber shock absorbers of adaptive stiffness on an elastic base. While these floors are sensitive to microclimate fluctuations, they have virtually unlimited service life. Moreover, the TPS has an improved shape at the point of deformation from dynamic impact.

Tournament Euro Sport and Matrix Sport are designed using the newest engineered flooring technologies, and are characterized by increased dimensional stability and use of foam elastomers. These new materials are suitable for use in interiors with wider temperature and humidity fluctuations, and demonstrate better performance when it comes dampening the spread of deformation from dynamic impact. Matrix Sport, in particular, has received high expert evaluation not only from athletes, but also from professional dancers.

Coswick sports floors easily match the flooring surfaces of the world's best indoor arenas – both in terms of functional characteristics, eco-friendliness, as well as maximizing athletes' performance potential.



### **TOURNAMENT PRO SPORT**

**TOURNAMENT SPORT** 

**TOURNAMENT EURO SPORT** 



**MATRIX SPORT** 

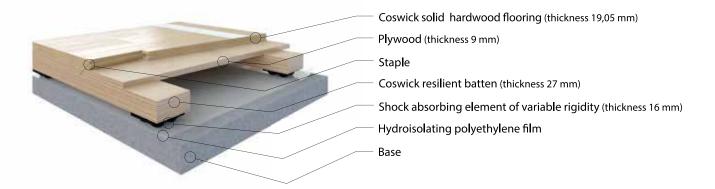
## **PROFESSIONAL SPORTS**



# **Tournament Pro Sport®**

Tournament Pro Sport® is a high performance sport hardwood flooring is intended for facilities used for training and holding professional competitions of all kinds, including international tournaments for team sports such as basketball, volleyball, handball, squash etc.

Tournament Pro Sport® flooring is based on solid hardwood strip flooring 19mm x 57.15mm (or 82.55mm) x 300...1845mm. Available species: Ash, Oak, Hard Maple. The flooring is installed over highly resistant plywood base, reinforced with resilient plywood battens and shock-absorbing elements of variable rigidity. Tournament Pro Sport® has a "deck"-style surface pattern.



# Technical Characteristics Tournament Pro Sport:

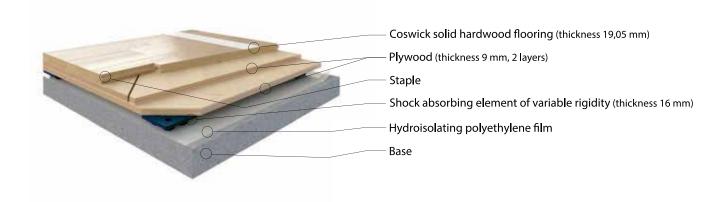
Technical Characteristic	Value			
Type of floor	Area-Elastic A4 (EN14904)			
Construction height, mm	71			
Species	Oak, Ash, Hard Maple			
Hardwood flooring dimensions, mm	57,15(82,55)x3001845			
Hardwood flooring thickness, mm	19,05			
Color / Finish	Natural / Resilient Sport Lacquer			
Shock absorption, %	66   EN 14808			
Vertical deformation, mm	3,5 EN 14809			
Friction, nominal unit	94   EN 13036-4			
Ball bounce, %	91   EN 12235			
Rolling load, mm	0,21   EN 1569			



# **Tournament Sport®**

Tournament Sport® is a high performance sport hardwood flooring created for use in gyms, training centers, as well as basket-ball, volleyball, handball, and squash halls etc.

Tournament Sport® flooring is based on solid hardwood strip flooring 19mm x 57.15mm (or 82.55mm) x 300...1845mm. Available species: Ash, Oak, Hard Maple. The flooring is installed over cross-laid highly durable plywood, reinforced anti-vibrational shock-absorbent elements from natural rubber. Tournament Sport® has a "deck"-style surface pattern.



Technical Characteristic	Value				
Type of floor	Area-Elastic A4 (EN14904)				
Construction height, mm	53				
Species	Oak, Ash, Hard Maple				
Hardwood flooring dimensions, mm	57,15(82,55)x3001845				
Hardwood flooring thickness, mm	19,05				
Color / Finish	Natural / Resilient Sport Lacquer				
Shock absorption, %	64   EN 14808				
Vertical deformation, mm	3,1   EN 14809				
Friction, nominal unit	94   EN 13036-4				
Ball bounce, %	93   EN 12235				
Rolling load, mm	0,21   EN 1569				



## **PROFESSIONAL SPORTS**



# **Tournament Euro Sport®**

Tournament Euro Sport® is a high performance sport hardwood flooring created for use in gyms, training centers, as well as basketball, volleyball, handball, squash.

Tournament Euro Sport® flooring is based on 2-layer engineered hardwood plank flooring 16mm x 107.95mm (or 127mm) x 300...1845mm. Available species: Ash, Oak, Hard Maple. The flooring is installed over cross-laid highly durable plywood, reinforced anti-vibrational shock-absorbent pads. Tournament Euro Sport® has a "deck"-style surface pattern.



### Technical Characteristics Euro Sport:

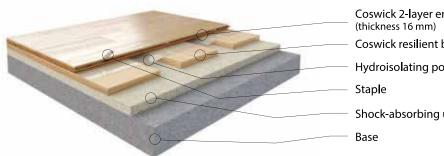
Technical Characteristic	Value				
Type of floor	Area-Elastic A4 (EN14904)				
Construction height, mm	55				
Species	Oak, Ash				
Hardwood flooring dimensions, mm	107,95(127)x300 1845				
Hardwood flooring thickness, mm	16				
Color / Finish	Natural / Resilient Sport Lacquer				
Shock absorption, %	62   EN 14808				
Vertical deformation, mm	3,6   EN 14809				
Friction, nominal unit	97   EN 13036-4				
Ball bounce, %	91   EN 12235				
Rolling load, mm	0,15   EN 1569				



# **Matrix Sport®**

Matrix Sport® is a high performance sport hardwood flooring created for use in gyms, training centers, as well as basketball, volleyball, handball, squash.

Matrix Sport® flooring is based on 2-layer engineered hardwood plank flooring16mm x 107.95mm (or 127mm) x 300...1845mm. The flooring is installed over cross-laid highly durable plywood, reinforced anti-vibrational shock-absorbent underlayment. Matrix Sport® has a "deck"-style surface pattern.



Coswick 2-layer engineered hardwood flooring

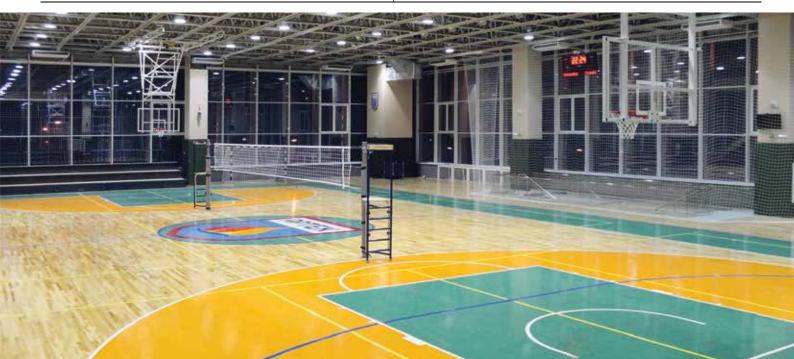
Coswick resilient batten (thicknessa 12 mm)

Hydroisolating polyethylene film

Shock-absorbing underlayment (thickness 15 mm)

### **Technical Characteristics Matrix Sport:**

Technical Characteristic	Value				
Type of floor	Area-Elastic A4 (EN14904)				
Construction height, mm	43				
Species	Oak, Ash				
Hardwood flooring dimensions, mm	107,95(127)x3001845				
Hardwood flooring thickness, mm	16				
Color / Finish	Natural / Resilient Sport Lacquer				
Shock absorption, %	60   EN 14808				
Vertical deformation, mm	2,8   EN 14809				
Friction, nominal unit	97   EN 13036-4				
Ball bounce, %	94   EN 12235				
Rolling load, mm	0,15   EN 1569				



# **FITNESS**











## Fitness Board®

Fitness Board® is sport hardwood flooring designed for interiors used for any type of sports-related activity: fitness, aerobics, yoga, dance halls and choreography studios, halls and courts used for hosting dance competitions, shows and exhibits, presentations and other public events.

Fitness Board® flooring is based on 2-layer engineered hardwood plank flooring 12,7mm x 107,95mm x 300...1845mm. Fitness Board® flooring is installed over shock-absorbing underlayment using elastic polyurethane glue. Fitness Board® has a "deck"-style surface pattern.



Coswick 2-layer engineered hardwood flooring for sports (thickness 12,7 mm)

Elastic polyurethane glue Shock-absorbing underlayment (thickness 15 mm) Base

# Technical Characteristics Fitness Board:

Fechnical Characteristic	Value		
Type of floor	Area-Elastic A4 (EN14904)		
Construction height, mm	28		
pecies	Oak, Ash		
Hardwood flooring dimensions, mm	107,95×3001845		
lardwood flooring thickness, mm	12,7		
Color / Finish	Natural / Silk Oil		
hock absorption, %	59   EN 14808		
ertical deformation, mm	3,8  EN 14809		
riction, nominal unit	93   EN 13036-4		
Ball bounce, %	99   EN 12235		
olling load, mm	0,28   EN 1569		



# **PORTABLE MOSAIC DANCE**















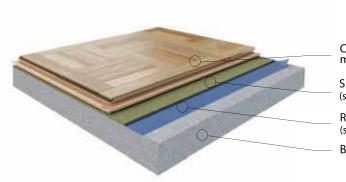




## Portable Mosaic Dance®

Coswick portable hardwood sports flooring Portable Mosaic Dance® is multifunctional floor covering made from natural wood and intended as a temporary platform for holding competitions in dance, sports tournaments, presentations, concerts, shows and other events that call for a podium or high end platform.

Production of Portable Mosaic Dance® flooring is based on use of solid parquet modules 30mm x 570mm x 570mm and with locking system to connect the modules. Each engineered flooring module consists of 2 layers: the top layer is 19 mm thick solid wood strips and base layer is 11 mm thick moisture-resistant birch plywood. Construction of the connecting lock ensures assembling unlimited times Approximate setup period of time for a 300m2 platform is 2-3 hours.



Coswick portable mosaic modular flooring board

Shock-absorbing underlayment (supply separately)

Reinforced PVC hydroisolation layer (supply separately)

Base

# **Technical Characteristics Portable Mosaic Dance:**

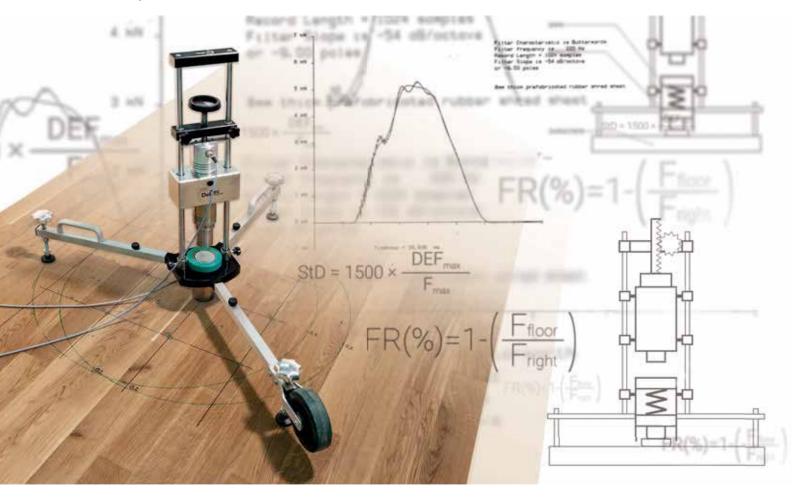
Technical Characteristic	Value		
Construction height, mm	30		
Species	Oak		
Hardwood flooring dimensions, mm	570x570		
Hardwood flooring thickness, mm	19,05		
Color / Finish	Natural / Silk Oil		
Friction, nominal unit	89   EN 13036-4		
Rolling load, mm	0,3   EN 1569		

"Not only are our floors a great choice for a festive and safe sports interior, they can also be assembled and disassembled in just a few hours."

Vladimir lanovski, founder and managing director of Coswick Hardwood Inc.

## COSWICK SPORTS FLOORS – QUALITY AND ENVIRONMENTAL RESPONSIBILITY

### Certified complex Artificial Athlete



All Coswick products are designed using cutting edge testing equipment (including Artificial Athlete, Berlin-Stuttgart, among others) and undergo multistage quality control.

As an additional quality guarantee, Coswick oversees the full production cycle and controls every step of the manufacturing process: from raw lumber down to the finished sports flooring.

Functionality, endurance, durability, highest safety characteristics, ease of maintenance, repairability, as well as beautiful appearance – all inherent features of Coswick sports flooring – make Coswick stand out from its competitors.

Excellent characteristics of Coswick sports floors are confirmed by corresponding international certifications.

### **Range of Wood Species:**

Solid hardwood species are traditionally used in manufacture of wood floors. Unlike softwoods, hardwood is valued for its hardness and wear resistance.





# **Features of Coswick Sports Flooring**

Sports Flooring Construction Type							
Technical Characteristic	Tournament Pro Sport	Tournament Sport	Tournament Euro Sport	Matrix Sport	Fitness Board	Fitness Mosaic	Portable Mosaic Dance
Type of floor	Area-Elastic A4 (EN14904)	Area-Elastic A3 (EN14904)	Area-Elastic A3 (EN14904)				
Construction height, mm	71	53	55	43	28	35	30
Species	Oak, Ash, Hard Maple	Oak, Ash, Hard Maple	Oak, Ash	Oak, Ash Oak, Ash		Oak	Oak
Hardwood flooring dimensions, mm	57,15x3001845 82,55x3001845	57,15x3001845 82,55x3001845	107,95x3001845	107,95x3001845	107,95x3001845	570x570	570x570
Hardwood flooring thickness, mm	19,05	19,05	16	16	12,7	19,05	19,05
Color / Finish	Natural / Resilient Sport Lacquer	Natural / Silk Oil	Natural / Silk Oil	Natural / Silk Oil			
Shock absorption, %	66  EN 14808 (A4 ≥55%<75%)	64  EN 14808 (A4 ≥55%<75%)	62 <b> </b> EN 14808 (A4 ≥55%<75%)	60  EN 14808 (A4 ≥55%<75%)	59 <b> </b> EN 14808 (A4 ≥55%<75%)	47 <b> </b> EN 14808 (A3 ≥40%<55%)	-
Vertical deformation, mm	3,5   EN 14809 (A4 ≥2,3<5)	3,1   EN 14809 (A4 ≥2,3<5)	3,6   EN 14809 (A4 ≥2,3<5)	2,8   EN 14809 (A4 ≥2,3<5)	3,8   EN 14809 (A4 ≥2,3<5)	1,9   EN 14809 (A3 ≥1,8<3,5)	-
Friction, nominal unit	94   EN 13036-4 (80-110)	94   EN 13036-4 (80-110)	97   EN 13036-4 (80-110)	97   EN 13036-4 (80-110)	93   EN 13036-4 (80-110)	86   EN 13036-4 (80-110)	89   EN 13036-4 (80-110)
Ball bounce, %	91   EN 12235 (≥90%)	93   EN 12235 (≥90%)	91   EN 12235 (≥90%)	94   EN 12235 (≥90%)	99   EN 12235 (≥90%)	93   EN 12235 (≥90%)	-
Rolling load, mm	0,21   EN 1569 (≤0,5mm, min. 1500N)	0,21   EN 1569 (≤0,5mm, min. 1500N)	0,15   EN 1569 (≤0,5mm, min. 1500N)	0,15   EN 1569 (≤0,5mm, min. 1500N)	0,28   EN 1569 (≤0,5mm, min. 1500N)	0,3   EN 1569 (≤0,5mm, min. 1500N)	0,3   EN 1569 (≤0,5мм, min. 1500N)

# **Use of Coswick Sports Flooring:**

	Sports Flooring Construction Type						
Type of facility	Tournament Pro Sport	Tournament Sport	Tournament Euro Sport	Matrix Sport	Fitness Board	Fitness Mosaic	Portable Mosaic Dance
Professional sport playground for ball games: basketball, volleyball, handball etc.	+	+	+	+	-	-	-
Indoor university playground for ball games: basketball, volleyball, handball etc.	+	+	+	+	-	-	-
Schools and university universal gymnasium.	+	+	+	+	+	-	-
Commercial sports complexes : squash, ping-pong, badminton.	-	-	-	+	+	+	-
Sports and recreation centers, clubs. Fitness studios.	-	-	-	+	+	+	-
Preschools, daycare centres. Game & activity rooms.	-	-	-	-	+	+	-
Portable platforms for sports, dance and public events.	-	-	-	<u>-</u>	-	-	+

### SPORTS MARKING AND MAINTANENCE

## MARKING OF COSWICK SPORT FLOORING



#### 1. MARKING ON UNFINISHED HARDWOOD FLOORING

The polyurethane water-based paint Coswick P 71 Sport Marking (4 basic colors) is recommended for marking unfinished sports hardwood flooring. For protective finished is recommended Coswick two-component polyurethane water-based sports lacquer F 31 High Traffic & Sport (complying with DIN 18032-2 and EN 14904).

Application. Place mask tape to form necessary playground lines over the primed hardwood flooring (Coswick F 01 Prime). Apply marking paint (P 71 Sport Marking) on lines by narrow roller and remove tape while the paint is still elastic. Wait until full dry out of the paint, apply 2-3 layers of lacquer (F 31 High Traffic & Sport).

#### 2. MARKING ON FACTORY FINISHED HARDWOOD FLOORING

There is a two-component polyurethane paint on the basis of organic solvents Coswick P 72 Sport Marking (4 basic colors) for marking sports hardwood flooring covered with factory made UV-curable polyurethane-acrylate.

Application. Place mask tape to form necessary playground lines over the cleaned hardwood flooring. Apply marking paint (P 72 Sport Marking) on lines by narrow roller and remove tape while the paint is still elastic. After full drying out the sports playground is ready for use.

## CARE AND MAINTENANCE OF COSWICK SPORTS FLOORS

#### 1. AREA MICROCLIMATE

When acceptable temperature and humidity is maintained, natural hardwood flooring retains its geometrical dimensions very well. Interiors, where Coswick floors are to be installed, need to maintain temperature in the rage of  $15-25^{\circ}$ C and relative humidity in the range of 40-65% (for floors that use engineered hardwood flooring), and 45-55% (for solid hardwood flooring). While methods for ensuring the proper microclimate might differ, it is imperative that it is continuously maintained based on accurate measurements of indoor temperature and humidity.

### 2. CLEANING AND MAINTENANCE INSTRUCTIONS

Ensure absence of abrasive particles (dust, sand) and contaminants (stains, dirt), by means of regular cleaning and maintenance. Use designated cleaning and repair products to ensure timely renewal of the wear layer of the protective finish.

To reduce ingress of abrasive particles and contaminants, place trapping mats at all entrances.

- The abrasive particles must be removed using a vacuum cleaner with an attachment that does not damage the protective and decorative finish (such as a bristle border) or a mop equipped with a deep cleaning pad, which prevents contact of abrasive particle with the floor surface.

  Frequency it is necessary to carry out cleaning as soon as abrasive particles appear, but no less than once a week.
- Water-soluble contaminants are removed using a microfiber pad, slightly moistened with a designated maintenance product (Coswick cleaner, concentrate). Cleaning can be done either manually or by using cleaning equipment. Ensure that no over moistening of the flooring surface occurs.

Frequency – it is necessary to carry out cleaning as required, but no less than once a month.

- Hard-to-remove stains can be removed manually, using soft cloth and Coswick specialty cleaner.
- Frequency as necessary, but this procedure is normally carried out immediate following cleaning of all water-soluble stains.

Coswick Hardwood Inc. manufactures and supplies a full line of cleaning and maintenance products. Coswick cleaning products undergo regular testing, are eco-friendly, and ensure long-lasting protection for Coswick surface finishes.

### 3. ADDITIONAL RULES OF MAINTENANCE

The need for special maintenance is due to the fact that sports lacquer, which conforms to the requirements of sports flooring standards, may gradually get "polished off" over time, as a result of intensive use of soft sports footwear, and may become more slippery.

The additional maintenance procedures are aimed at maintaining the functional characteristics of the flooring surface that depend on the condition of the protective finish, and include slip resistance, level of gloss and reflectance. As an added bonus, regular maintenance extends the life of the surface finish.

After cleaning the floor, apply designated film-forming agent, and polish it onto the surface. In small interiors, the process can be done manually using a soft cloth or pad. In large gyms or arenas – use a polishing machine with a soft pad.

Frequency – as often as necessary, but no less than once every 2 months. Carry out on a clean surface only.

Coswick recommends to use its ready-to-use Sport cleaner-restorer (packages of 5 litres for a single treatment of 500 sq. m. of sports covering).

For additional consultations on issues related to the operation of sports floors bearing the Coswick trademark, please contact your regional distributor or Coswick Hardwood Inc. directly.







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