

## **Business Services Contracts Office**

5735 47th Avenue ● Sacramento, CA 95824 (916) 643-2464

Rose Ramos, Chief Business Officer Jessica Sulli, Contract Specialist

### **ADDENDUM NO. 1**

Date: March 25, 2022

Issued by: Sacramento City Unified School District

Project: 0410-416, Albert Einstein Gym Floor

You are hereby notified of the following changes, clarifications, or modifications to the original Contract Documents, Specifications, and Drawings. This Addendum shall supersede the original project documents, and shall take precedence over anything to the contrary therein. All Addenda shall be acknowledged in the Bid Form. Failure to do so may result in disqualification of the bid. All other conditions remain unchanged.

### AD1.01

**SUBSTITUTION REQUEST – The District has reviewed and approved the attached substitution request.** 

### AD1.02

#### RESPONSES TO REQUESTS FOR INFORMATION/CLARIFICATION:

 According to Sheet A1 the scope of work includes installation of floor leveling compound such as Ardex or equal. The degree of unevenness of the concrete is unforeseen. Guessing is not good practice for bidding for public jobs and can be very inaccurate in this case. We suggest to issue an Allowance amount for the concrete correction using the floor leveling compound.

Response: Include an Add Alt for floating the floor up to  $\frac{1}{2}$ ". Will have to maintain a 3" floor section. A new bid form is attached to this addendum.

 Section 096460 and sheet A1 call for Connor PermaFlex system as the basis of design. PermaFlex system's profile is 3" with use of 15/32" plywood specified in paragraph 2.1.D.1. However, Paragraph 1.1.A.1.a calls for <u>+</u>3-1/2" slab depression. Please clarify.

Response: See section 2.1.C.4. Factory applied trusses are to be provided for 3-1/2" depressed slab. Also, the floor leveling will affect the height.



3. According to the Hazardous Materials Report, lead is found in the orange paint, under the black paint of the steel base and floor ventilation system around the perimeter of the Gym. Please make sure to invite the asbestos abatement/lead-based paint removal companies to the job walk.

Response: This is the Contractor's responsibility for any lead abatement work as needed.

4. Sheet A1, Item 4 calls for installation of new electrical receptacles. Is this within the scope of work of the wood flooring contractor?

Response: The receptacle locations are existing. The note calls out to replace the existing receptacle with a new receptacle. If the flooring contractor is acting as the general then yes, this work is within the flooring Contractor's scope.

5. Detail A2/3D calls for removal of the existing metal perimeter angle and reinstallation after (N) flooring. From the Hazardous Materials Report we know that there is a lead behind the steel base. Who is going to remove the base and clean from the lead-based paint for reinstallation?

Response: This is the Contractor's responsibility.

Would you consider to discard the base completely and provide a new vent cove base?

Response: The intent is to re-use the steel angle base. Remove base and reinstall. Paint over lead paint after reinstall.

6. Detail A2/3D calls for existing 6" continues metal angle behind the perimeter base. Please confirm that the metal angle is going to stay in place. Who is going to clean the lead-based paint from the metal angle?

Response: The six inch metal angle is to stay in place. Remove and reinstall (as needed) and paint over lead based paint.

7. Detail A2/4D calls for existing metal floor plate. Please confirm that all existing metal floor plates (thresholds and transitions) will be salvaged and reinstalled.

Response: The metal floor plates are welded to the door frame and are not intended to be removed.

8. Please confirm that existing main volleyball court sleeves and covers have to be salvaged and reinstalled.

Response: The plans call for new volleyball court sleeves and standards.

9. Detail A2/5D calls for floor sleeve, cover and sports standard. Is this new or existing?

Response: New



Is this for the main volleyball court only?

Response: Yes

Who is going to provide the standards and nets? Volleyball standards, etc. should be provided by others.

Response: Providing the standards and nets is part of the scope of work and to be provided by the entity acting as the general contractor.

10. Please confirm that no game lines are required in Practice rooms.

Response: Confirmed.

11. Do the badminton and/or practice volleyball courts have sleeves and covers? If yes, please provide the locations.

Response: No. There are not practice volleyball courts. The pickle ball courts have portable nets and standards.

### **ATTACHMENTS:**

- 1. Revised Bid Form and Proposal
- 2. Approved Substitution Request

**END OF ADDENDUM NO. 1** 

### **DOCUMENT 00 41 13**

### **BID FORM AND PROPOSAL**

Sacramento City Unified School District ("District" or "Owner")				
From:(Proper Name of Bidder)				
ACKNOWLEDGEMENT OF GENERAL CONDITIONS  The General Conditions and definitions therein are accessible on the SCUSD website at <a href="https://www.scusd.edu/construction-projects">www.scusd.edu/construction-projects</a> and are an integral part of the Contract Documents. The Contractor shall not disclaim knowledge of the meaning and effect of any term or provision of these General Conditions, and Supplemental Conditions, if any, and agrees to strictly abide by their meaning and intent. In the event the Contractor fails to initial this acknowledgement, the District shall have the right to reject the Bid.  CONTRACTOR'S INITIALS:				
The undersigned declares that the Contract Documents includin Bidders and the Instructions to Bidders have been read and agr necessary labor, materials, tools, transportation, services and e work in accordance with the terms and conditions of the Contra limitation, the Drawings and Specifications of Bid No. 0410-416	rees and properties and properties to leave the leave to leave the	oses to furnish all perform and furnish all		
PROJECT: ALBERT EINSTEIN GYM FLOOR				
and will accept in full payment for that Work the following total lump sum amount, all taxes included. The basis of determining the lowest responsible, responsive bidder will be based upon the stated value of the TOTAL BID.				
ABASE BID	_ Dollars	\$		
B	_ Dollars	\$		
C	_ Dollars	\$		
Alternate #1				
ADDITIVE - FLOATING THE FLOOR UP TO 1/3"	_Dollars	\$		

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

### 1. BID SUBMISSION

Bids must be submitted electronically to E-Builder.

### 2. **REVIEW OF WORK IN CONTRACT DOCUMENTS**

The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.

#### 3. **DISCREPANCIES AND OMISSIONS**

The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) as described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.

The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager or other official point of contact for the District before Bid date to verify the issuance of any clarifying Addenda.

### 4. WORK COMMENCEMENT AND COMPLETION

The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.

### 5. **LIQUIDATED DAMAGES**

The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.

#### 6. **DISTRICT BID RIGHTS**

It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.

### 7. **DOCUMENTS TO BE ATTACHED**

The following documents are attached hereto and hereby attests that all required provisions of said forms will be strictly adhered to:

- Bid Bond on the District's form or other security.
- Designated Subcontractors List.
- All other forms listed in the instructions to bidders

#### 8. ACCEPTANCE OF ADDENDA

Acceptance of the following addenda is hereby acknowledged:

No, Dated No, Dated No, Dated	No, Dated
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### 9. **REQUIRED LICENSE**

Bidder acknowledges that the license required for performance of the Work is a B or C-15.

### 10. LABOR HARMONY

The undersigned hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.

### 11. **BIDDER COMPETENCY**

Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations.

Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that Bidder will comply with the provisions of Labor Code section 2810(d) if awarded the Contract.

Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.

Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.

#### 12. **BIDDER RISKS**

Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.

### 13. FALSE CLAIMS

Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.

#### 14. BIDDER CERTIFICATION

The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of

Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

Furthermore, Bidder hereby certifies to the District that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this	day of			20
Name of Bidder				
Type of Organization				
Signed by				
Name and Title of Signer				
Address of Bidder				
Taxpayer's Identification No	. of Bidder			
Telephone Number				
Fax Number				
E-mail		Web page		
Contractor's License No(s):	No.:	_ Class:	_ Expiration Date:	
	No.:	_ Class:	_ Expiration Date:	
	No.:	_ Class:	_ Expiration Date:	
Public Works Contractor Reg	gistration No.:			

END OF DOCUMENT



To: HMR Architects, Kim Demongey

From: Action Floor Systems, Matt Lyman

Date: March 9, 2022

RE: Substitution Request, Albert Einstein MS, Gym Floor Replacement

Kim,

Greetings. Please see the following substitution request and supporting documentation for the Albert Einstein Middle School, Gym Floor Replacement.

I propose the Power Channel by Action Floor Systems as an equal to the specified Permaflex by Connor Sport Floors. Both systems feature a factory assembled channel with a 7/16" rubber pad, one layer of sheathing and MFMA maple as specified.

Please note the Power Channel systems uses a layer of ¾" CDX and the Permaflex uses a layer of ½" CDX. The thicker sheathing provides a more uniform playing surface and a more resilient floor for the athletes and large fixed objects like bleachers.

I note the slab depression is 3-1/2" and our system is 2-7/8". Action Floor Systems will provide a continuous truss system to place between the concrete and Power Channel. We have recently utilized this design at Yuba City College and Encina High School (San Juan USD). This design maintains the performance and integrity of the Power Channel System.

I appreciate your time reviewing my request. Please call if you have any questions.

Thank you,

Matt Lyman | Vice President, International Sales, Canada, Central & South America

e: matt@actionfloors.com

p: 715-476-3512 | m: 503-442-4248

**Action Floor Systems, LLC** 

4781 N. US Hwy 51, Mercer, WI 54547

toll free: 800 746-3512

voice: 715 476-3512

fax: 715 476-3585

web: actionfloors.com



# SUBSTITUTION REQUEST

Project:	Albert Einstein MS	Substitution Request Number:		
		From: Matthew Lyman, Action Floor Systems		
To:	HMR Architects, Kim Demongey	Date: 08Mar22		
		A/E Project Number:		
Re:	Substitution Request, Wood Athletic Flooring Contract For:			
C:C	4i - Tid - W - 1 Add - El i			
Specifica	Section: 09 6460 Page: 1			
	Section. 09 0400 Fage. 1	Atticie/ratagiapii. rait ii		
Proposed	d Substitution: Power Channel with Truss by Action	on Floor Systems		
Manufac	turer: Action Floor Systems Address: 4781 N	US Hwy 51, Mercer, WI Phone: 503 466 4248		
Trade Na	ame: Wood Athletic Floors	Model No.: Power Channel DS		
Installer:	Boberg Hardwood Floors Address: Loomis,	CA Phone: 916-205-9019		
History:	☐ New product ☐ 2-5 years old ☐ 5-10	yrs old More than 10 years old		
Differen	ces between proposed substitution and specified p	roduct: Like the specified system, the Power Channel uses channel placed 16"		
OC with	7/16" rubber pads with MFMA maple as specified	d. The unique difference is the power channel uses a layer of 3/4" plywood		
whereas	the permaflex uses a layer of 1/2" plywood.			
Noint	-by-point comparative data attached - REQUIREI	D BY A/E		
Reason f	for not providing specified item: Not on specifical	ion		
Similar I	installation:			
Sillillai 1	Project: Encina HS	Architect:		
	Address: Sacramento, CA	Owner: San Juan Unified School District		
	Address. <u>Sacramente</u> , en	Date Installed: 2019		
Droposed	l substitution affects other parts of Work: ⊠ No	Yes; explain		
TToposec	is abstitution affects other parts of work. 🖂 two			
Savings	to Owner for accepting substitution: Per bid.	(\$).		
_	d substitution changes Contract Time:	Yes [Add] [Deduct]days.		
торово				
Supporti	ng Data Attached: 🛛 Drawings 🖾 Product I	Data Samples, upon req. Tests Reports		

### SUBSTITUTION REQUEST

(Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become
  apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

• Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.						
Submitted by:	Matthew Ly	man				
Signed by:	Milatter Sylver					
Firm:	Action Floor Systems					
Address:						
Telephone:	503 466 424	18				
_			ions, cross view draw	ing, letter.		
		<i>S</i> / <b>1</b>	,			
A/E's REVIE	W AND ACT	ION				
			accordance with Spec			
☐ Substitution	on rejected - U	Jse specified materia		with Specificatio	n Section 01330.	
			e specified materials.			
Signed by:	May	'y				Date: 03/11/22
				□ g 1:		
Additional Co	omments:	☐ Contractor	☐ Subcontractor	☐ Supplier	Manufacturer	□ A/E □
-						
-						

### **PROJECT PROFILE**

### California's Yuba College





# Replacing a hardwood maple basketball court can reveal unknown existing conditions.

Running into an unexpected issue could cause problems with project budgets or force facilities to compromise on quality.

When the team installing a new hardwood court at Yuba College in Marysville, California, removed the old floor, they discovered two big problems underneath. Correcting the problems could've been costly, but the dealer turned to Action Floor Systems® for an effective and reliable solution.

### **The Challenge**

The dealer uncovered a depression measuring  $5-\frac{1}{2}$  to 7 inches deep, but was expecting to see a standard 3-inch depression. Not only was the slab depression underneath the old floor deeper than assumed but, much like a bathtub, it had sloping sides as well as a gradual incline from one end to the other.

Industry standards for hardwood athletic flooring call for a slab with no more than a 1/8-inch +/- variance within a 10-foot diameter. Existing conditions in the Yuba College facility were not acceptable and would negatively impact the court unless this was addressed.

Action Floors Vice President of Domestic and International Sales, Matt Lyman, was working with the dealer on this project. He says this type of slab is common in the region.

"We encounter sports flooring projects with slab depression complications several times a year," Lyman says. "One solution is to pour concrete until you get to the required replacement system depression height. The slab is leveled, and you are ready to start the maple floor system installation once the concrete has cured. The problem is, the cost of this method can be prohibitive."

Fortunately, Action Floors already had an established alternative to remedy the situation.

While other solutions might rely on glue and staples, our truss system ensures the floor lasts a lifetime.

> - Matt Lyman, Action Floor Systems®





### **The Process**

Lyman says the inconsistency of the slab posed a threat to Yuba College's investment in a premium sports floor system.

"The floor would certainly have a shortened lifespan," he explains. "The overall performance would be reduced; the floor would have poor playing characteristics and exhibit dead spots."

Yuba College chose the EN-certified Action PowerChannel for its gymnasium. This solid maple, anchored athletic floor is a system with factory-welded, steel-encased sleepers and 100% natural rubber AirTech pads.

Action Floors worked with the architect, general contractor and dealer to recommend our factory-assembled truss system. This supports the floor system's channels with a sturdy base, which is attached to blocks spaced 16 inches apart.

"The nice thing about Action Floors Systems' solution is how strong and durable it is," Lyman says. "We install a truss system that utilizes proven building materials and concepts. While other solutions might rely on glue and staples, our truss system ensures the floor lasts a lifetime."

Lyman estimates we saved Yuba College tens of thousands of dollars by installing the truss system to correct the inconsistent slab.

### The Results

Yuba College had their new hardwood maple court from Action Floors installed in 2013. Coaches and physical education instructors say they immediately noticed the difference.

"Before, you'd dribble a ball and it would stop bouncing," says Doug Cornelius, head coach of the Yuba College 49ers men's basketball team. "It would just fall to the floor and die. With the new floor, we get a consistent ball bounce and a great surface to play on."

In addition to being much better for the school's athletics program, students at Yuba College and people in the surrounding community have also benefited from the new court.

"When the gym was done, it became one of the premier places in the community and a beacon for other colleges," says Yuba College P.E. professor, Carey Lane.

Many types of facilities choose to use Action Floors products, from high schools to professional sports venues. We strive to understand their individual needs and challenges to offer the best sports flooring solutions.

View our complete line of hardwood maple sports floors as well as synthetic sports flooring and discover the right surface for your next project. Get specifications, data sheets and detailed drawings in the Architect Resources section of our website.

When the gym was done, it became one of the premier places in the community and a beacon for other colleges.

- Carey Lane, Yuba College P.E.



**FEATURED SYSTEM:**Action PowerChannel Sports Floor System





### **PowerChannel**

SYSTEM TYPE: ANCHORED RESILIENT



Factory fabricated steel channels and laminated sleepers with resilient pads for exceptional performance and stability.

AirTech II 7/16" (11 mm) natural rubber performance pads.

Truss shown in other drawing.

Random Length (RL) MFMA Northern Hard Maple by Action: Action Long Length (FJ)

Action Expansion Ridge Technology (ER)

**Testing Agency:** Certified by ISSS

**Performance Meets or Exceeds:** EN 14904 Type 4

**Slab Depression:** 25/32" (20 mm): 2-7/8"" (73 mm)

33/32" (27 mm): 3-1/8" (79 mm)

LEED:











FloorScore®-certified Proprietary certified EPD®

FSC®-certified Maple and Subfloor available MR credits - based on products, selected materials and facility locations

Performance and System Stability:

Anchored resilient design for stability

- Excellent athletic playability
- · Excellent shock absorption
- Factory fabricated subfloor for superior consistency
- SCORES\* compliant















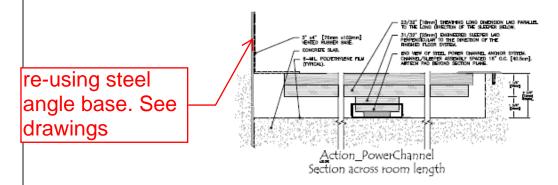


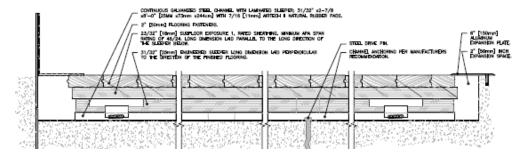




<sup>\*</sup> Sustainable Construction Of Renewable Engineered Surfaces. Action has been certified as a Carbon Negative provider following a Life Cycle Assessment conducted by the University of Wisconsin and Carbon Clear, an international independent auditor of manufacturing carbon profiles.

- Factory fabricated subfloor channels combined with APA rated subfloor deck provides a superior level of uniformity.
- Engineered to deliver outstanding playability and performance while minimizing unwanted vibration/energy transfer to the athlete.
- The manufacturer and flooring shall be independently verified by the guidelines of the ISO 14040-2006 and ISO 14044: #2006 Life Cycle Assessment (LSA) confirming a negative carbon footprint.
- Carbon Evaluation must be inclusive and based on all corporate facilities, offices and mills.
- The manufacturer and flooring shall be independently verified by the guidelines of the ISO 14064-1:2006 World Resource Institutes Greenhouse Gas Protocol, Scope 1, 2 and 3.
- The manufacturer and flooring shall be registered in the Collaborative for High Performance Schools (CHPS) Product Database.
- Floor system manufacturer must provide a Life Cycle Assessment and an Environmental Product Declaration (EPD®) in accordance with the Product Category Rule Version 2.2014.
- Floor system manufacturer must be FloorScore® Certified in accordance with CDPH 01350.





Complete product specifications and system drawings are available online at: www.actionfloors.com



ACTION FLOOR SYSTEMS, LLC
4781 N. US Hwy 51 • Mercer, WI 54547

TOLL FREE: 800-746-3512 • VOICE: 715-476-3512

FAX: 715-476-3585 • EMAIL: info@actionfloors.com



### Truss shown in following drawing.

### **System Comparison Chart**

Perma-Flex by Conner Sport Floors - Power Channel by Action Floor Systems

Permaflex by Connor, specified



Power Channel by Action Floor Systems



### Steel Channels

- Permaflex uses a steel encased channel with a 7/16" pad. 16 gauge steel.
- Power Channel uses a steel encased channel with a 7/16" pad and upper sleeper. 16 gauge steel.

### Plywood Subfloor

- Connor 1/2"
- Action 3/4"

### Rubber Pad

 Both systems employ a 7/16" rubber pad to provide resiliency

### List of Materials

Permaflex by Connors Powerchannel by Action Floor Systems, LLC.

6 mil poly 6 mil poly

Anchored, per spec, 900lb pullout Anchored, per spec, 900lb, pullout

Channel with 7/16" pad Steel encased wood channel with pad encased

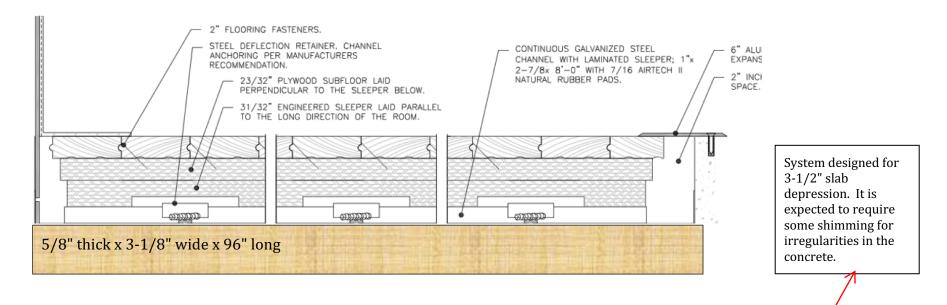
encased by steel

1/2" plywood layer 23/32" plywood layer

MFMA Maple per spec MFMA Maple per specification

System depression with 25/32" maple, Permaflex 3", Power Channel, 2-7/8"





The power channel system is 2-7/8" tall, adding a 5/8" sleeper under the power channel, which will give a total system height of 3-1/2".

Leveling compound is part of the scope. See drawings.



### POWERCHANNEL DEEP SLAB FLOOR SYSTEM

This floor system utilizes high performance 7/16"(11mm) natural rubber pads attached to a durable laminated sleeper retained within an anchored continuous steel channel to deliver a floor system with stability, and strength. This creates a floor system that is highly resilient, has uniform playability and consistent shock absorption to maximize the athlete's comfort and performance. The Power Channel System has been design to allow for significant changes in slab depression without diminishing performance.

The Action PowerChannel Floor System is suitable for high performance arenas, gymnasiums, multipurpose, indoor running facilities.

### PART 1 - GENERAL

### 1.01 Description

- A. The information herein details high performance floor system utilizing a continuous galvanized steel channel, laminated sleepers with 7/16(11mm) AirTech II natural rubber pads all factory assembled and loaded into the steel stabilization channel, 23/32"(19mm) plywood subfloor attached to the sleepers and finish flooring. Steel channels are fastened to the slab with no impediments to incremental expansion movement.
- B. Moisture barriers must be adequate for conditions. The slab depression has been estimated at 5". Flooring contractor shall field verify depression and provide approved system design.

### 1.02 Quality Assurance

- A. Action Floor Systems, LLC or approved equal, must supply all system component parts.
- B. Action Floor Systems, LLC, or approved equal must approve the Flooring contractor and flooring contractor shall be MFMA Certified.
- C. Action Floor Systems, LLC, or approved equal shall have a minimum of ten years experience designing and manufacturing wood athletic flooring and have no bankruptcy filings in the last seven years.
- D. Flooring materials must be allowed to acclimate to building conditions on the job site in a dry, well-ventilated area, not in contact with masonry, and shall be installed at a moisture content not to exceed 8% except in areas of constant high humidity where the moisture content of the flooring shall not exceed 10%.
- E. Floor System shall have bee independently tested, and meets or exceeds the most recent (2009) international standards: EN 14904.
- F. Flooring system shall be independently verified to meet or exceed the SCORES criteria for environmental design and athletic performance.

### Sustainable Construction Of Renewable Engineered Surfaces

### 1.03 Working Conditions

- A. The wood flooring shall not be installed until all masonry, plastering, tile, marble, and terrazzo work is completed, and overhead mechanical trades and painters have finished in wood floor area. The building must be reasonably dry; all openings must be closed in; permanent heating, ventilating and air conditioning installed and operating before, during and after installation.
- B. The concrete slab shall be dry, free of foreign materials, and turned over to the wood flooring contractor broom clean. Moderate room temperature of 65 degrees (18 C) or more shall be maintained a week preceding and throughout the duration of the work. Humidity conditions within the building shall approximate humidity conditions which will prevail when the building is occupied. Care should be taken to maintain humidity within the range of 35% to 50%.
- C. Installer shall be responsible for leveling of the slab to provide an adequate foundation for Power Channel System. If existing "bulldog clips" or embedded sleepers are in place, they shall be removed by contractor and remaining troughs shall be filled in with Ardex or other cement-type product to provide an adequate footprint for the Channel.

### 1.04 Warranty

- A. Action Floor Systems, LLC. warrants the material it ships to be free from defects in materials and workmanship for a period of one year and the flooring installer warrants the installation of the flooring to be free of defects in materials and workmanship for a period of one year. The exclusive remedy under this warranty shall be replacement of defective material supplied by Action Floor Systems, LLC., or correction of defective installation by the flooring installer. All implied warranties of merchantability or fitness for intended use are limited to the period of this warranty. This warranty excludes consequential damages.
- B. This warranty does not cover damage caused by fire, winds, floods, chemicals or other abuse, or by failure of other contractors to adhere to specifications, or neglect of reasonable precaution to provide adequate ventilation during hot and humid weather. This warranty also excludes damage due to excessive dryness or excessive moisture from humidity, spillage, migration through the slab or wall or any other source. This warranty also excludes damage to floors due to ordinary wear and tear, faulty construction of the building (other than the flooring installation), separation of the concrete slab, underlying the floor, settlement of walls, or use of water on the floors.
- C. During period of the warranty, the floor cannot be coated without the approval of the flooring contractor.

### PART 2 - PRODUCTS

2.01 Materials - Basis-of-Design: Power Channel by Action Floor Systems, LLC. Other manufacturers by pre-approval only.

### A. Flooring

- 1. Flooring shall be 25/32" x 2-1/4" northern hard maple, TGEM, MFMA-RL grade marked as manufactured by Action Floor Systems, LLC. The use of 1/2''(12mm) thick maple flooring or non MFMA flooring is not allowed
- 2. Expansion Ridge Technology (ERT), allows for incremental and uniform expansion (optional).

### B. Subfloor

- 1. Vapor barrier shall be 6-mil polyethylene
- 2. Truss or shim system as designed by Action Floor Systems, LLC.
- 3. PowerSleepers shall be pre-assembled with AIRTECH II 7/16"(11mm) natural rubber pads and loaded into the PowerChannels as supplied by Action.
- 4. Channels shall be continuous galvanized steel.
- 5. Channel retainers shall be galvanized steel.
- 6. Channel anchoring pins shall be 1-1/4"(32mm) long hardened steel.
- 7. Plywood subfloor; 23/32" (19mm) C-D face, exposure 1, rated plywood.
- 8. Flooring fasteners shall be 2"(50mm) cleats or coated staples.
- 9. Wall base shall be 3" x 4"(76mm x 102mm) vented cove base with premolded outside corners (specify black or brown), as supplied by Action.

### PART 3 - EXECUTION

### 3.01 Inspection

- A. Inspect concrete slab or proper tolerance and dryness, reporting in writing any discrepancies to the general contractor.
- B. All work required to put the concrete slab in acceptable condition shall be the responsibility of the general contractor.
- C. The slab shall be broom cleaned by the general contractor.
- 3.02 Installation, prior to installation, slab shall be corrected to provide adequate base for floor system.
  - A. Cover concrete slab with 6mil poly, lapping edges 6"(150mm) and seal with adhesive or 2"(50mm) duct tape.
  - B. PowerChannel System channels-sleepers are placed end-to-end, 16" (406mm) oncenter in a brick pattern at right angles to the direction of the finish flooring.
  - C. PowerChannel shall be attached to concrete with steel anchoring pins, 4 per sleeper when shims are used, 3 when the slab meets specification tolerances.
  - D. Install 23/32"(19mm) thick plywood subfloor with the long dimension parallel to the direction of the PowerChannels, secure with 1-1/2"(38mm) fasteners, install plywood in a brick pattern, no plywood joint shall fall on a PowerChannel joint.

E. Machine fasten strip flooring parallel to the long dimension of the area. End joints must be properly driven up and proper spacing provided for the humidity conditions of the area as recommended by the local Action Flooring Systems, LLC. flooring contractor. Allow 2"(50mm) expansion voids at perimeters and all vertical obstructions.

### 3.03 Floor Sanding

- A. Use coarse, medium, and fine grade sandpaper.
- B. After sanding, buff entire floor using 100 grit screenback or equal grit sandpaper with a heavy-duty buffing machine.
- C. Vacuum or tack floor before first coat of seal.
- D. Floor shall present a smooth surface without drum stop marks, gouges, streaks, or shiners.

### 3.04 Finishing

- A. Inspect entire area of floor to ensure the surface is acceptable for finishing, completely free from sanding dust, and perfectly clean.
- B. Apply seal and finish per manufacturer's instructions.
- C. Buff and vacuum or tack between each coat after it dries.
- D. Apply game lines accurately after the seal coat, after buffing and vacuuming. Lay out in accordance with drawings. For game lines, use current rules of association having jurisdiction. Lines shall be straight with sharp edges in colors selected by the architect. Game line paint shall be compatible with finish.

### 3.05 Base Installation

A. Affix rubber vent base to wall with recommended adhesive or screws. Miter all inside corners carefully. Use premolded outside corners.

### 3.06 Clean up

A. Clean up all unused materials and debris and remove.

### 3.07 Maintenance

A. Upon completion of floor installation, the owners, attendants or individuals in charge and responsible for the upkeep of the building are to see the care and maintenance instructions of the Maple Flooring Manufacturers Association are followed. Failure to follow care and maintenance guidelines may void warranty.

IT IS THE POLICY OF ACTION FLOOR SYSTEMS, LLC. TO CONTINUOUSLY UPDATE AND IMPROVE OUR PRODUCT LINES. THEREFORE, WE RESERVE THE RIGHT TO CHANGE, MODIFY OR DISCONTINUE SYSTEMS,

## SPECIFICATIONS AND ACCESSORIES OF ALL PRODUCTS AT ANY TIME WITHOUT ANY NOTICE OR OBLIGATION TO ANY PURCHASERS.

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