

MINUTES
FLOORS WORKING GROUP

Saturday, May 4, 2002
Marriott South Hotel
Dallas/ Ft. Worth, Texas

Chair: Tim Hansen, Oasis Stage Werks, principal; producer
Recording Secretary: William L. Maiman

1 Opening Remarks

Tim Hansen noted that we had a quorum present, welcomed everyone to the meeting and we started at 0800 hours. However, the meeting start time was delayed due to telephone problems related to the audio-conferencing, so the actual start time was at 8:35AM.

2 Attendance and Membership

People attending:

Keith Sklar; Actors' Equity Assoc.; Observer; General interest
Ken Greenwood; Actors' Equity Assoc.; Observer; General Interest
Tim Hansen; Oasis Stage Werks; Principal; Producer
Tim Cox; PLASA; Principal; Producer
Michael Sean Graves; Rosco Laboratories; Principal; Producer
Jerry Gorrell; Theatre Safety Programs; Principal; User
George Sotter; Sotter Engineering Corp.; Invited Guest
Robin Crews; Wriphitson; Johnson; Haddon & Williams; ASTC; Visitor
Richard D. Thompson; Thompson Associates; Visitor
Wally Blount; Columbus McKinnon; Visitor

2.1 Introduction of those present

An Orange sign-in sheet was passed around the room. While it was circulating, those present introduced themselves. It was noted that some members are participating via audio conferencing and that others had sent their regrets.

2.2 Call for Quorum

It was determined that a quorum was present.

3 Requirements for membership

Tim Hansen reviewed the requirements for membership. Every principal member of the working group is required to attend meetings. Any principal member and voting alternate that both miss three consecutive meetings will have their membership status changed to observer. This action will be taken as the last item of business at each meeting and recorded in the minutes of that meeting.
No action was required.

4 Approval of minutes from the previous meeting

Jerry Gorrell moved that the minutes from the previous meeting be accepted. Michael Sean Graves seconded the motion. The motion was accepted unanimously on a voice vote.

5 ESTA Declarations

5.1 Anti-trust statement

Tim Hansen read aloud the anti-trust statement:

"The ESTA Board of Directors, the Technical Standards Committee and the leadership of this Working Group will reject or nullify any actions that unlawfully restrain trade. Anyone who feels that such an action is being or has been taken is requested to bring that matter to the attention of the chair immediately. Anyone who feels that action in restraint of trade have been taken and not properly annulled is requested to notify the TSC (chairs), or the ESTA President immediately.

"ESTA legal counsel has informed us that violations of the antitrust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$100,000 and imprisoned for up to three years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

No anti-trust issues were brought to the attention of the chair:

5.2 Call for Patents:

Tim Hansen read aloud the call for patents:

"ESTA intends not to publish any standard that contains protected intellectual property, unless that property can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its programs contain no protected intellectual property."

"In keeping with the open disclosures policy, I ask if anyone present wishes to notify the working group of the existence of a patent that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright to notify the working group of its existence."

No patent or copyright issues were brought to the attention of the chair.

6 Approval of Agenda

There was brief discussion on tow items. Michael Sean graves informed everyone that Rosco has a patent on a new sub-floor process. Tim Hansen noted that other companies have patents on their processes –and that there is no conflict. Also, it was suggested that Performing floors be added to the agenda. Michael Sean Graves moved that the agenda be approved, with Performing Floors added. Jerry Gorrell seconded the motion. It was accepted unanimously on a voice vote.

The full list of Floors Working Group voters, including those not present, during the period of the meeting was:

Name	Company	Representing	Voting Status	Int. Cat.
Bob Dagger	American Harlequin Corp.	American Harlequin Corp.	P	P
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	P
Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	A	P
Tim Cox	PLASA	PLASA	P	G
Michael Sean Graves	Rosco Laboratories	Rosco Laboratories	P	P
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Steven Wiese	Wenger Corp.	Wenger Corp.	P	P
			6 votes	4 P 1 G 1 U

7 Old Business

7.1 Introduction of Dr. George Sotter – Tim Hansen

Tim Hansen briefly introduced Dr. George Sotter and welcomed him to the meeting. Dr. Sotter explained his background, specialized knowledge, and his interest in floors. He discussed his research his articles, and his book and added that he is the chair of the floor slip committee of the Ceramic floor Institute. Dr. Sotter also noted that there are over 200 methods of testing floors and that there is an initiative by ASTM towards clarifying the situation. He noted that some tests have bias and that there is a need to have repeatability amongst the tests. It was noted that the DIN standards are particularly precise and restrictive –though this may be due to the fact that DIN has developed more standards than other organizations. Also, human factors need to be taken into consideration and to correlate the data from mechanical based tests. Sotter also noted that as regards slip and falls accidents, the presence of moisture acts as a lubricant increasing falls and that dry and wet floors are diametrically opposed – a floor can respond differently under different conditions.

7.2 News from Rosco Russia – Michael Sean Graves

Due to time constraints this report was postponed till the July meeting.

7.3 Review status of known information / Standards on Floors – Tim Hansen

7.3.1 Review of PLASA provided DIN Standard

Tim Hansen thanked Plasa and Tim Cox for providing and paying for an official copy of the DIN 18032.2 standard, which is currently only available in German. As noted in previous meetings, discussion followed concerning the relevancy of a standard for sports floors to performance floors, the need to change the testing values to conform to performance applications, and that only some tests specified in the DIN standard are relevant to the entertainment industry. Tim Hansen noted that the DIN standard was the basis for the Cincinnati tests, as noted in section 7.3.4 of the minutes.

Other people noted that it is difficult to test for every situation –i.e. a floor has to support scenery and performers. Also the study validates portions of the DIN testing that we can use in our work.

7.3.2 Where is Dr. Paul Elliott? – Tim Hansen

Dr. Paul Elliott is missing and has not been located since leaving his job with Robbins Flooring.

7.3.3 Research on other appropriate DIN standards - Keith Sklar

Keith Sklar noted that all of the standards are in German, and very few standards have been translated into English. There is a two-page list of DIN standards appropriate for floors, though it is uncertain which ones are relevant for performance-based flooring. After discussion, Keith agreed to continue researching this and to work directly with Michael Sean Graves to contact the German office of Rosco and to develop a list of DIN standards that are relevant and important for the Working Group to evaluate. It was noted that previously Jerry Gorrell recommended that DIN 51130 be investigated.

7.3.4 Research on other appropriate standards – Bob Dagger

There was to be a report on ISO standards by Bob Dagger, and this report was postponed to the July meeting.

7.3.5 Examination of the values used in the Cincinnati testing to develop a range of values for dance – Tim Hansen

There was a brief discussion as to why the DIN test was used – and it was noted that a client of Fisher Dachs was evaluating dance floors and the client wanted to evaluate floors currently being used on Broadway to determine a type that would be best suited for a future Broadway production. Tim noted that the report was distributed to members of the ESTA Floors Working Group, minus the conclusions, as per an agreement with the client. Tim reminded everyone that the report was useful in that it gave hard numbers, that shock absorption and area/point deflection are very valid, and that testing is good for identification of a range of numbers, but it does not indicate what the existing facilities would be classified as, due to the fact that the equipment is not very portable.

Recess

A 15-minute recess was called at 10:25. The meeting resumed at 10:45, after it was determined that a quorum was present.

7.3.6 Examination of resiliency and rake as interdependent issues - Ken Greenwood
Ken Greenwood reported that Equity has been working with researchers to design a proposal for the examination of stages and raked stages and slippage injuries. A written proposal was distributed and will be discussed at the next meeting. It was noted that all documents are for committee use only. Dick Thompson explained the process of creating floors for film/TV facilities. He noted that there is a difference between the coasts and that East coast facilities use a "marbelite" surface that is poured on concrete, like a terrazzo floor and then polished. The West Coast uses a concrete floor base, with wood sleepers on top, then covered with plywood and masonite. Voids are filled with sand and an appropriate moisture barrier is used. The committee did not reach a decision as to the urgency of investigating Hollywood type floors.

The study will be discussed at the next set of meetings.

7.3.7 Report on Terminology, alternative words, Akron rubber Center and PARA – Michael Sean Graves / Bob Dagger

Due to time, this report was tabled. However it was noted that the "Jerwood Institute" in the UK should be added to the list. Tim Cox offered to investigate.

7.4 ANSI Standard on Floors – Refine and approve the scope, determine the process and assign tasks - Tim Hansen

7.4.1 Test Criteria and Data Collection - Tim Hansen

This was briefly reviewed as part of section 7.3.4, but mostly left for a future meeting.

7.4.2 Draft of Scope of proposed Standard – Tim Cox

Due to time constraints, this discussion was tabled for the next meeting – with Tim Cox and Tim Hansen to present a revised scope.

7.5 WG Mission Statement terminology – Michael Sean Graves and Seth Popper

There was discussion and it was agreed to continue work on revisions at the next meeting, with Michael Sean Graves distributing additional written versions of the Mission Statements.

8 New Business

The discussion on Performance floors was tabled till the July meeting.

9 Other Business

There was none.

10 Schedule for Future Meetings

The Technical Standards Program will hold meetings in Dallas over the weekend of July 26 – 28. LDI 2002 is scheduled for October 18 – 20 in Las Vegas, with the Floors meeting being held on Wednesday, October 16th at 8AM.

11 Adjournment

Jerry Gorrell made a motion to adjourn and Michael Sean Graves seconded the motion. The meeting ended at 12:15PM.

Floors Working Group Membership List at the End of the Meeting

Name	Company	Representing	Voting Status	Int. Cat.
Keith Sklar	Actors' Equity Association	Actors' Equity Association	O	G
Ken Greenwood	Actors' Equity Association	Actors' Equity Association	O	G
Bob Dagger	American Harlequin Corp.	American Harlequin Corp.	P	P
Fred Allen	Fred Allen & Associates	Fred Allen & Associates	O	U
Edward Paget	Jones & Phillips Associates, Inc.	Jones & Phillips Associates, Inc.	O	G
Nevin Kleege	Kleege Industries	Kleege Industries	O	G
Seth Popper	League of American Theatres and Producers, Inc.	League of American Theatres and Producers, Inc.	O	G
Gary Justesen	Oasis Stage Werks	Oasis Stage Werks	A	P
Tim Hansen	Oasis Stage Werks	Oasis Stage Werks	P	P
Tim Cox	PLASA	PLASA	P	G
Michael Sean Graves	Rosco Laboratories	Rosco Laboratories	P	P
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Mark Elliott	Walt Disney Co.	Walt Disney Company	O	U
Steven Wiese	Wenger Corp.	Wenger Corp.	P	P

Voting Status

- O Observer, non-voting
- P Principal voting on behalf of an organization or company
- A Alternate voting member representing an organization or company
- I Individual voting member representing no entity other than him or herself

Interest Category

- G General Interest
- U User of floors or flooring products
- P Manufacturer of floors or flooring products