

SUMMARY OF TOPICS

The following changes in requirements are being proposed:

- 1. For Preliminary Review Only: Proposal to revise the hyperthermia related markings and important safety instructions to include additional information for pregnant women**
- 2. For Preliminary Review Only: Proposal to revise requirements for audio/video components, Section 39, to address speakers and to allow for additional product constructions and the requirements for transformers and power supplies, Section 29, to allow the use of power supplies that comply with UL 1012**
- 3. For Preliminary Review Only: Proposal to clarify and expand requirements for transformers and power supplies in Section 29**
- 4. For Preliminary Review Only: Proposal to specify the ambient temperature for the resistance to impact test requirements in Section 54**
- 5. For Preliminary Review Only: Proposal to update, clarify, and re-organize the requirements for spacings in Section 23**

COMMENTS DUE: NOVEMBER 13, 2006

This proposal is for review and comment only (no ballot at this time). Please note that comments on a preliminary review document will not receive a response from the proposal author through CSDS. Instead, the proposal author is asked to review the comments received during the preliminary review and adjust the proposals and/or supporting rationale as the author determines to be appropriate. The preliminary review process is an informal mechanism that provides authors with the opportunity to refine their proposals before the proposals advance in UL's standards development process. Normally, the next step in the process is the more formal STP ballot and stakeholder review process. Only comments newly posted during the more formal STP ballot and stakeholder review process will be addressed and responded to.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

- 1. For Preliminary Review Only: Proposal to revise the hyperthermia related markings and important safety instructions to include additional information for pregnant women**

RATIONALE

Proposal submitted by: Gary Siggins, Underwriters Laboratories Inc.

**FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION**



Documents
Document Sharing Hub

After discussion at a Task Group meeting in April 2006 and the UL 1563 Standards Technical Panel (STP) meeting in June 2006, it was felt the product markings and user safety instructions should be revised to provide more information. This additional information would help pregnant women make an informed decision concerning spa use. These proposals affect Figures 69.1, 70.1, 70.2 and 71.1 and paragraphs 72.3.1 (item 11) and 72.4.1 (item 12). Other proposals concerning construction requirements related to the hazard of hyperthermia may be proposed at a later date.

Note that for revised Figures 69.1, 70.1, 70.2 and 71.1, only the revised graphics are shown. The current versions of the graphics can be viewed by clicking on the "View Standard" entry under "Actions" on the left menu bar of the work area home page.

The text "DURING PREGNANCY, SOAKING IN HOT WATER MAY CAUSE DAMAGE TO THE FETUS." and "LIMIT USE TO 10 MINUTES AT A TIME. MEASURE WATER TEMPERATURE WITH WATERPROOF FEVER THERMOMETER" was added to Figures 69.1, 70.1, and 70.2. The text "MEASURE WATER TEMPERATURE WITH WATERPROOF FEVER THERMOMETER" was added to Figure 71.1.

The footnotes for Figure 71.1 are also being revised to correlate with the numbering used in the other figures. (Footnote b will now refer to 1/4 inch and footnote c to 1/8 inch.)

PROPOSAL

*FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION*



Documents
Document Sharing Hub

Figure 69.1
Temporary marking for spas mentioned in 69.1

 WARNING^a	
DURING PREGNANCY, SOAKING IN HOT WATER MAY CAUSE DAMAGE TO THE FETUS.^c LIMIT USE TO 10 MINUTES AT A TIME. MEASURE WATER TEMPERATURE WITH WATERPROOF FEVER THERMOMETER.^c	
PREVENT DROWNING^b 1. SUPERVISE CHILDREN AT ALL TIMES.^c 2. ATTACH SPA COVER AFTER EACH USE.^c 3. SPA HEAT CAN CAUSE HYPERTHERMIA AND UNCONSCIOUSNESS.^c 4. SPA HEAT IN CONJUNCTION WITH ALCOHOL, DRUGS, OR MEDICATION CAN CAUSE UNCONSCIOUSNESS.^c	PREVENT ELECTROCUTION^b 1. NEVER PLACE ANY ELECTRIC APPLIANCE WITHIN 5 FEET OF SPA.^c
NOTE: THIS MARKING IS TO BE REMOVED ONLY BY THE OWNER.^c	

S3993B

Signal Word – Black Lettering/Orange Background

Safety Alert Symbol – Black Triangle/Orange Exclamation Point

^a Letter height shall not be less than 3/8 inch (9.5 mm).^b Letter height shall not be less than 1/4 inch (6.4 mm).^c Letter height shall not be less than 1/8 inch (3.2 mm).

FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION



Documents
 Document Sharing Hub

Figure 70.1
Marking for spas mentioned in 70.2.1

 WARNING^a	
DURING PREGNANCY, SOAKING IN HOT WATER MAY CAUSE DAMAGE TO THE FETUS.^c LIMIT USE TO 10 MINUTES AT A TIME. MEASURE WATER TEMPERATURE WITH WATERPROOF FEVER THERMOMETER.^c	
PREVENT DROWNING^b 1. SUPERVISE CHILDREN AT ALL TIMES.^c 2. ATTACH SPA COVER AFTER EACH USE.^c 3. SPA HEAT CAN CAUSE HYPERTHERMIA AND UNCONSCIOUSNESS.^c 4. SPA HEAT IN CONJUNCTION WITH ALCOHOL, DRUGS, OR MEDICATION CAN CAUSE UNCONSCIOUSNESS.^c	PREVENT ELECTROCUTION^b 1. NEVER PLACE ANY ELECTRIC APPLIANCE WITHIN 5 FEET OF SPA.^c

S3994B

Signal Word – Black Lettering/Orange Background

Safety Alert Symbol – Black Triangle/Orange Exclamation Point

^a Letter height shall not be less than 3/8 inch (9.5 mm).^b Letter height shall not be less than 1/4 inch (6.4 mm).^c Letter height shall not be less than 1/8 inch (3.2 mm).

FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION



Documents
 Document Sharing Hub

Figure 70.2
Marking for equipment assemblies mentioned in 70.3.1

 WARNING^a	
DURING PREGNANCY, SOAKING IN HOT WATER MAY CAUSE DAMAGE TO THE FETUS.^c LIMIT USE TO 10 MINUTES AT A TIME. MEASURE WATER TEMPERATURE WITH WATERPROOF FEVER THERMOMETER.^c	
PREVENT DROWNING^b 1. SUPERVISE CHILDREN AT ALL TIMES.^c 2. ATTACH SPA COVER AFTER EACH USE.^c 3. INSTALL A SUCTION GUARD WITH MARKED FLOW RATE NO LESS THAN ____ GPM TO AVOID HAIR AND BODY ENTRAPMENT.^c	PREVENT ELECTROCUTION^b 1. INSTALL AT LEAST 5 FEET FROM WATER USING NONMETALLIC PLUMBING.^c 2. DO NOT INSTALL UNDER SPA SKIRT OR WITHIN AN ENCLOSURE THAT WOULD RESTRICT VENTILATION.^c 3. IF BLOWER IS INCLUDED, INSTALL AT LEAST 1 FOOT ABOVE MAXIMUM WATER LEVEL.^c

S3995B

Signal Word – Black Lettering/Orange Background

Safety Alert Symbol – Black Triangle/Orange Exclamation Point

^a Letter height shall not be less than 3/8 inch (9.5 mm).^b Letter height shall not be less than 1/4 inch (6.4 mm).^c Letter height shall not be less than 1/8 inch (3.2 mm).

FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION



Documents
 Document Sharing Hub

Figure 71.1
Safety sign for spas mentioned in 71.9

 WARNING^a	
DURING PREGNANCY, SOAKING IN HOT WATER MAY CAUSE DAMAGE TO THE FETUS.^c LIMIT USE TO 10 MINUTES AT A TIME. MEASURE WATER TEMPERATURE WITH WATERPROOF FEVER THERMOMETER.^c	
PREVENT DROWNING^b SPA HEAT SPEEDS UP THE EFFECTS OF ALCOHOL, DRUGS, OR MEDICINE AND CAN CAUSE UNCONSCIOUSNESS.^c IMMEDIATELY LEAVE SPA IF UNCOMFORTABLE OR SLEEPY.^c	PREVENT CHILD DROWNING^b WATER ATTRACTS CHILDREN^c ALWAYS ATTACH A SPA COVER AFTER EACH USE.^c

S3997B

Signal Word – Black Lettering/Orange Background

Safety Alert Symbol – Black Triangle/Orange Exclamation Point

^a Letter height shall not be less than 3/8 inch (9.5 mm).^b Letter height shall not be less than ~~1/8 inch (3.2 mm)~~ 1/4 inch (6.4 mm).^c Letter height shall not be less than ~~1/4 inch (6.4 mm)~~ 1/8 inch (3.2 mm).

FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION



Documents
 Document Sharing Hub

72.3.1 A spa shall be additionally provided with the following important safety instructions:

7. DANGER – Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.

8. DANGER – Risk of Injury. The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible.

Never operate spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

9. DANGER – Risk of Electric Shock. Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum 8 AWG (8.4 mm²) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.

10. DANGER – Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of a spa.

11. WARNING – To reduce the risk of injury:

a) ~~The water in a spa should never exceed 40°C (104°F).~~ Water temperatures between 38°C (100°F) and 40°C (104°F) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

b) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 38°C (100°F).

c) Before entering a spa, the user should measure the water temperature with an accurate waterproof fever thermometer since the tolerance of water temperature-regulating devices varies.

d) The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.

e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

f) Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

12. (For spas with a gas heater):

WARNING – Risk of Suffocation. This spa is equipped with a gas heater and is intended for outdoor use only unless proper ventilation can be provided for an indoor installation.

FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION



Documents
Document Sharing Hub

13. SAVE THESE INSTRUCTIONS.

72.4.1 An equipment assembly shall be additionally provided with the following important safety instructions:

7. WARNING – Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use a spa or hot tub unless they are closely supervised at all times.

8. DANGER – To reduce the risk of drowning from hair and body entrapment, install a suction fitting(s) with a marked flow rate that equals or exceeds the flow rate marked on the equipment assembly.

9. DANGER – To reduce the risk of injury, do not remove the suction fittings. Never operate a spa or hot tub if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the equipment assembly.

10. DANGER – Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of a spa or hot tub.

11. WARNING – Risk of Electric Shock. Install at least 5 feet (1.5 m) from inside wall of hot tub or spa using nonmetallic plumbing.

12. WARNING – To reduce the risk of injury:

a) ~~The water in a spa should never exceed 40°C (104°F).~~ Water temperatures between 38°C (100°F) and 40°C (104°F) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

b) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 38°C (100°F).

c) Before entering a spa or hot tub, the user should measure the water temperature with an accurate waterproof fever thermometer since the tolerance of water temperature-regulating devices varies.

d) The use of alcohol, drugs, or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of drowning.

e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

f) Persons using medication should consult a physician before using a spa or hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

13. (For equipment assemblies with a gas heater)

*FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION*



Documents
Document Sharing Hub

WARNING – Risk of Suffocation. This equipment assembly uses a gas heater and is intended for outdoor use only unless proper ventilation can be provided for an indoor installation.

14. (For equipment assemblies with a blower)

WARNING – Install blower no less than 1 foot (305 mm) above the maximum water level to prevent water from contacting electrical equipment.

15. SAVE THESE INSTRUCTIONS.

2. For Preliminary Review Only: Proposal to revise requirements for audio/video components, Section 39, to address speakers and to allow for additional product constructions and the requirements for transformers and power supplies, Section 29, to allow the use of power supplies that comply with UL 1012

RATIONALE

Proposal submitted by: Gary Siggins, Underwriters Laboratories Inc.

The present requirements in Section 39 for audio and video equipment used in spas were discussed at the June 2006 STP 1563 meeting. After discussion it was felt the present text concerning speakers should be reviewed and clarified. It was also felt that existing paragraph 29.4 concerning transformers and powers supplies was restricting the performance of audio equipment. After review of these Sections UL agrees the requirements for speakers should be updated. The requirements in paragraph 29.4 concerning audio power supplies were not intended to restrict higher power output equipment but reflected the best available technology at the time. UL therefore proposes this paragraph to be amended to allow power supplies with greater output power than Class 2.

Note that the proposed changes to 29.4 also include the proposals discussed under Topic 3.

PROPOSAL

29.4 A ~~transformer or~~ separate power supply powering an audio/video system shall comply with the performance and constructional requirements specified in the Standard for Class 2 and Class 3 Transformers, UL 1585, or in the Standard for Class 2 Power Units, UL 1310, or in the Standard for Power Units Other Than Class 2, UL 1012.

Exception: ~~An audio/video component, and any associated components that may be electrically connected to it (such as speakers), is not required to comply with 29.4 when all of the components are enclosed in a suitable electrical enclosure that is inaccessible to the occupant from either within (or outside of) the tub. For example, an audio/video system inaccessible to the occupant but equipped with a remote control for operation.~~

39.1 Audio/video components shall not be accessible to the occupant as defined in 3.3.

Exception No. 1: Audio components (such as a radio, cassette player, CD player) may be located within 5 feet (1.52 m) of the tub water, when:

a) The component(s) do not present a risk of electric shock as defined in 3.20; or

FOR INTERNAL UL OR CSDS USE ONLY –
NOT FOR OUTSIDE DISTRIBUTION



Documents
Document Sharing Hub