

Proposal for amendments to ECE/TRANS/WP.29/GRSP/2011/13 (Draft Amendment 2 to global technical regulation No. 9 - Phase 2 (Pedestrian safety))

Note: This document was prepared by the expert from Japan in order to conduct Technical/Editorial amendments. The amendments are supported by Flex-TEG members.

I. Proposal

Paragraphs 7.1.2., amend to read:

”7.1.2. Lower legform II to bumper test procedure

The test impactor shall be stored during a period of at least four hours in a controlled storage area with a stabilized temperature of 20 ± 4 °C prior to impactor removal for test. After removal from the storage the impactor shall not be subjected to conditions other than those pertaining in the test area.

Each test shall be completed within two hours of the impactor's to be removed from the controlled storage area.”

Paragraphs 8.2.2.2.1., amend to read:

“8.2.2.2.1. **The test impactor shall be stored for a period of at least four hours in a controlled storage area with a stabilized temperature of 20 ± 2 °C prior to impactor removal for certification. The test impactor shall have a temperature of 20 ± 2 °C at the time of impact.** The test facility used for the certification test shall have a stabilized temperature of 20 ± 4 °C during certification.”

Paragraphs 8.2.3.2.1., amend to read:

“8.2.3.2.1. **The test impactor shall be stored for a period of at least four hours in a controlled storage area with a stabilized temperature of 20 ± 2 °C prior to impactor removal for certification. The test impactor shall have a temperature of 20 ± 2 °C at the time of impact.** The test facility used for the certification test shall have a stabilized temperature of 20 ± 4 °C during certification.”

Insert additional amendments on Paragraphs 6.1.1., to read:

“6.1.1. Temperature and humidity

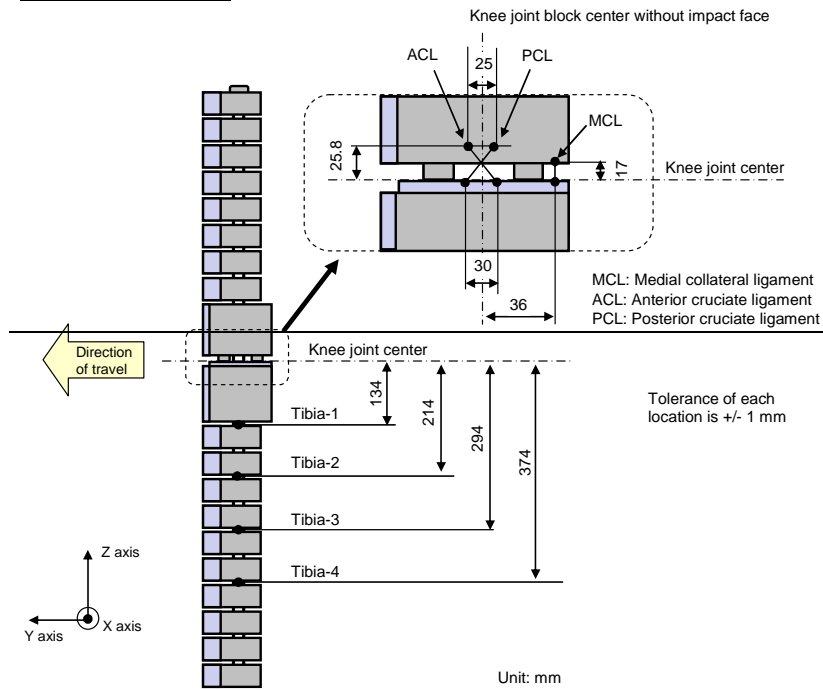
At the time of testing, the test facility and the vehicle or sub-system shall have a relative humidity of 40 percent \pm 30 percent and stabilized temperature of 20 ± 4 °C. **However, in the case to conduct Lower legform impactor II test, only the requirement of temperature, 20 ± 4 °C, shall be considered.**”

Figure 17., amend to read:

“Figure 17

Lower legform II; instrument locations

Instruments locations



Instruments locations

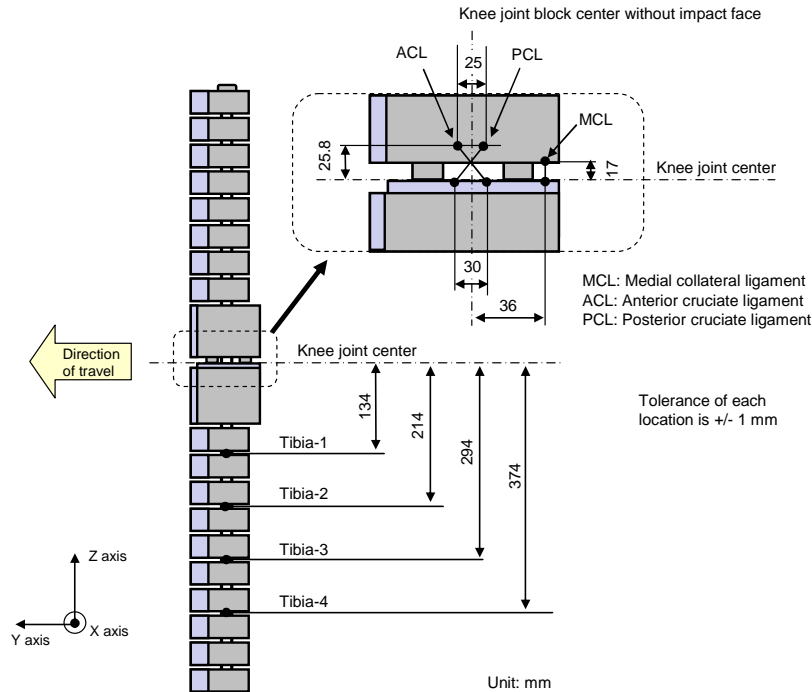
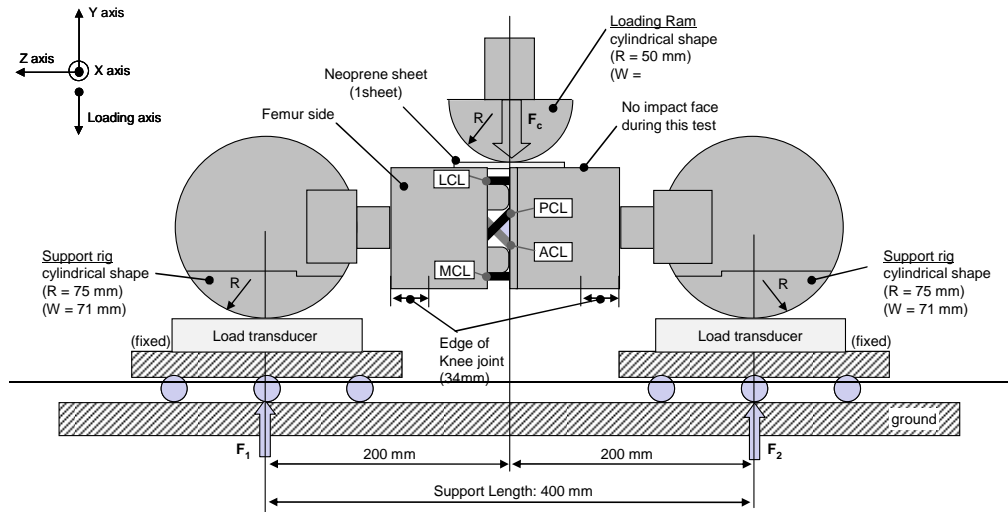


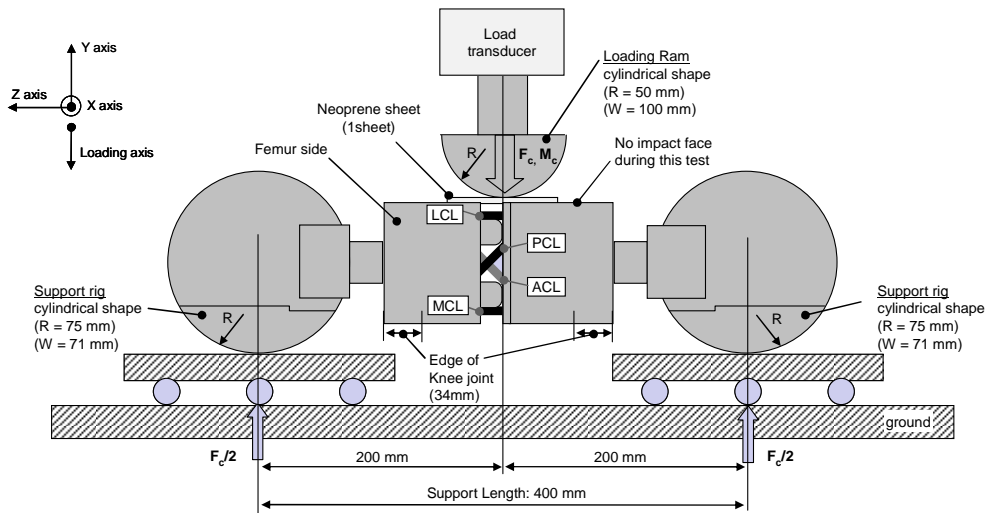
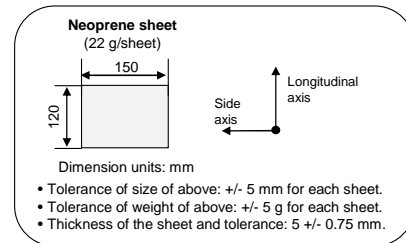
Figure 35 ., amend to read:

“ Figure 35

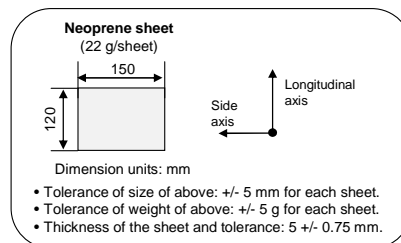
Lower legform II test set-up for knee joint in static certification test (see paragraph 8.2.1.5.)



F_G : External loading force at center of knee joint
 F_1 : Support force of Femur side of knee
 M_1 : Bending moment at Knee joint center (Nm) = $F_1 \times 0.2$ (m)
 R : Radius, W : Width along to the side axis



F_C : External loading force at center of knee joint
 M_c : Moment center (Nm) = $F_C/2 \times 0.2$ (m)
 R : Radius, W : Width along to the side axis



II. Justification

Following Technical/Editorial amendments are supported by Flex-TEG members:

Paragraphs 7.1.2.: Impactor soak time is added. (technical)

Paragraphs 8.2.2.2.1., Impactor soak time is added and test area condition is amended. (technical)

Paragraphs 8.2.3.2.1., Impactor soak time is added and test area condition is amended. (technical)

Insert additional amendments on Paragraphs 6.1.1., Test area condition during the Lower legform II test is amended (technical).

Figure 17 ., Indicated locations are amended (editorial):

Figure 35 ., Load transducer positions and comments are amended/updated (technical):
