

Official Testing Institute for the Building Industry

The Institute for Building Materials, Solid Building and Fire Prevention

Director: H. Falkner, Prof. Dr. B/Eng

Express Letter

EUROMAC 2**Carreau de la mine B.P. 22****F – 57730 Folschviller****France**

Your Reference	Your Message From	Our Reference	Official	Tel Ext.
Date				
mdl.	29.09.1993	49/Nau/Ma H.Nause	-5475	14.01.1994

Fire prevention regulation evaluation of MM 100 walls, made from Styrofoam building blocks, connected to each other by metal struts with a 16cm thick reinforced concrete casing, with regard to classification in the fire resistance class F90

Dear Sir/Madam

Referring to the conversation on 29.09.1993, when you requested that we draw up a fire prevention regulation for MM 100 walls. These MM 100 walls are made from basic 45 mm thick polystyrene building blocks and are connected together by metal struts (Sheet thickness 1mm). The distance between both polystyrene partitions is 16cm. The polystyrene building blocks are embossed on three sides so that they fit together like a model, building both upwards and side wards. The cavity between the partitions is effused with 16cm thick of supporting concrete. Further construction details for the MM 100 walls are contained in enclosure 1 with this letter.

In respect to fire prevention regulations, the polystyrene building block can be looked on as casing. This means that the boundary conditions of a classification in the fire prevention class F 90 can be furnished, due to the 160mm thick reinforced concrete core of the wall. There are no reservations about classifying the MM 100 walls according to DIN standard 4102, pt.4, and table 35, edit.1993. It follows from this that in consideration of the classification of supporting walls in the fire prevention class F 90, at least 140mm thick walls with a saturation factor of $\alpha = 1.0$ are necessary, opposite an existing continuing wall of 160mm. The metal struts with sheet thickness of 1.0 mm do not affect the existing wall thickness sufficiently for there to be any problem with classification in the fire prevention class F 90- designation F90-AB.

Particular Details

The afore said evaluation applies only in the case where supporting and load bearing building structures can endure fire resistance for at least 90 minutes. The validity of this evaluation ends on 14.01.1994. An extension of this period of validity can then be applied for.

Kind Regards,

Dip. Eng. Nause

IBMB

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Your Message From	Our Reference	Official	Tel Ext.	Date
08.11.1994	078/94-NAU-	H.Nause	-5475	30.11.1994

Fire prevention regulation evaluation of MM 100 walls, made from Styrofoam building structures, connected to each other by metal struts with a 16cm thick reinforced concrete coat, with regard to classification in the fire resistance class F90; Letter no. 49/Nau/Ma from 14.01.1994

Re: Amendment letter with regard to the use of round steel with a diameter of 4 mm instead of the approved 1mm wide and 6mm high steel rods

Dear Sir/Madam

In reply to your inquiry from 08.11.1994, we wish to inform you that statements made in the above mentioned letter, no.49/Nau/Ma dated 14.01.1994 continue to be valid if, instead of the

approved 1mm thick and 6mm high steel rods, round steel with a diameter of 4mm is used. This means that the granted classification is not affected by this measurement.

This amendment letter applies only, in connection with the above-mentioned letter. The period of validity of this amendment letter, ends with the validity of the above-mentioned letter.

Kind Regards

Dr. Wesche
Department Head

IBMB

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Your Reference Date	Your Message From	Our Reference	Official	Tel Ext.
07.010.1998	136/98-Nau	H.Nause	-5475	12.10.1998

RE: Validity of the fire prevention regulation evaluation of MM 100 walls (49/Nau/Ma) from 14.01.1994

Dear Sir/Madam

In response to your above mentioned request, we wish to inform you that the above mentioned fire prevention regulation evaluation referring to:

MM 100 walls, made from Styrofoam building blocks, connected to each other by metal struts with a 16cm thick reinforced concrete casing, classified in the fire resistance class F90

continues to remain valid.

The validity of the fire prevention regulation evaluation (49/Nau/Ma) from 14.01.1994 ends in this letter on 14.01.2004.

This fire prevention regulation evaluation can be used as a building fire regulation certificate together with DIN standard 4102-4: 1994-03, if variations from the fire prevention certificate are not significant.

Kind Regards

Dip. Eng. Nause

Enclosure 1 to letter 49/Nau/Ma

