



NIPPON KAIJI KYOKAI

Certificate

Certificate No.
03BQ105FPA(AL)

OF

APPROVAL

Item	: A-60 class cable penetration
Type	: RISE multi-cable penetrations
Specification	: See Annex.
Manufacturer	: Beele Engineering B.V. Beunkdijk 11, 7122 NZ Aalten, The Netherlands
Place of manufacture	: CSD International B.V. Postbus 30, 6970 AA Brummen, The Netherlands
Testing standard	: FTP Code Annex1 / Part 3
Test report	
Test laboratory	: Warrington Fire Research Center, United Kingdom
Report number	: 104226 and 104228
Additional test	: Beele Engineering B.V. (Report number : 0212-002)

This is to certify that the above type of products has been approved by Nippon Kaiji Kyokai with type approval No. OIFPA37DA and that products of the type will be accepted for use onboard ships classed with the Society for compliance with the relevant requirements of the Society's *Rules for the Survey and Construction of Steel Ships* and those of the *International Convention for the Safety of Life at Sea, 1974, as amended*, subject to approval of the Flag Administration and conditional upon that product verification be carried out by the Society.

This certificate is valid until 28th June 2006.

Issued at Tokyo on 25th June 2003.

NIPPON KAIJI KYOKAI

H. Kitada
General Manager



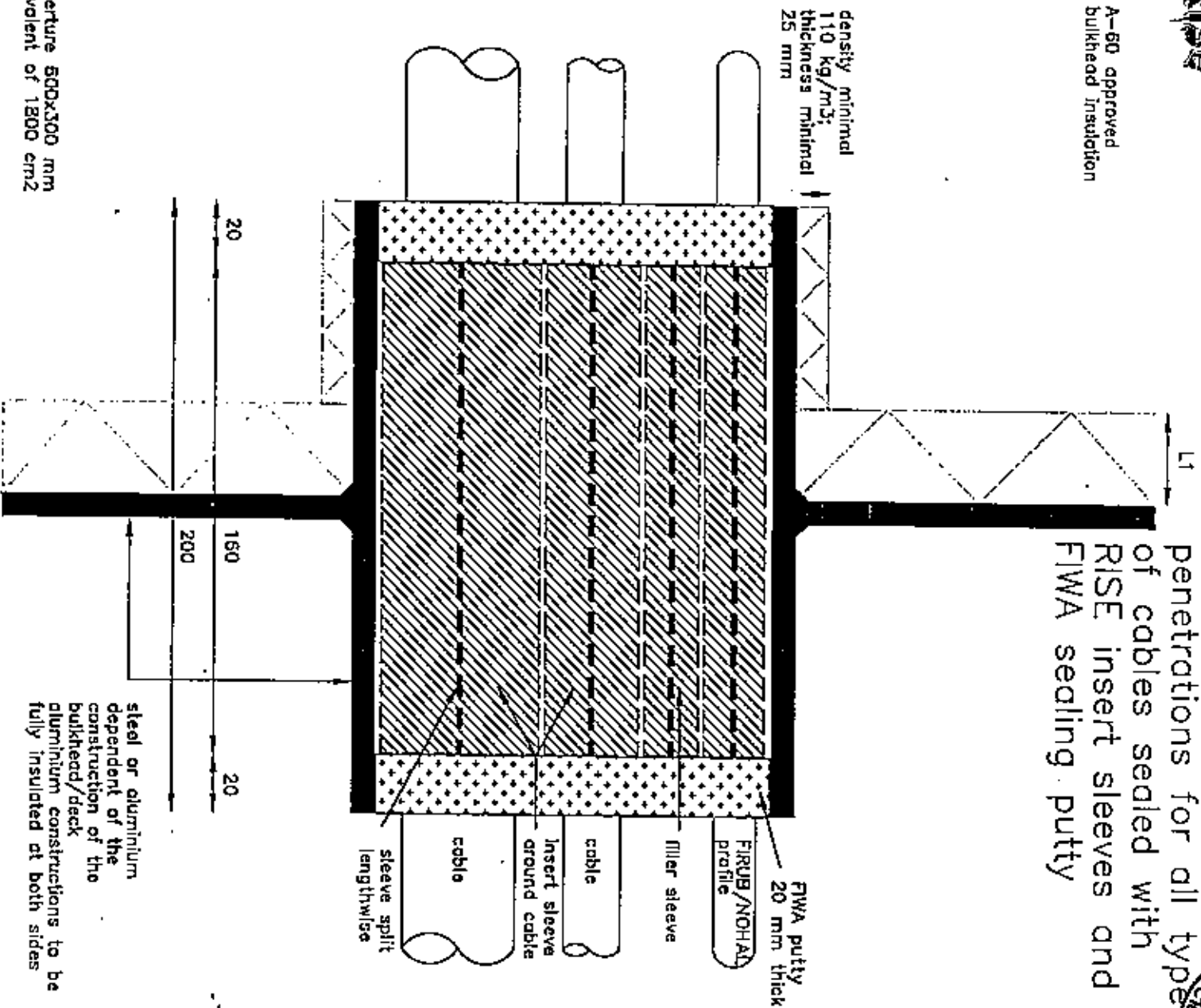
Material and Equipment Department

Initial approval date : 29th June, 2001



L1 = A-60 approved
bulkhead insulation

A0-A60 class
penetrations for all types
of cables sealed with
RISE insert sleeves and
FIWA sealing putty



size aperture 500x500 mm
or equivalent of 1800 cm²

tested at full cable fill capacity
according to IMO Res. A.754(18)

steel or aluminium
dependent of the
construction of the
bulkhead/deck
aluminium constructions to be
fully insulated at both sides

A0-A60

CABLE PENETRATION



Description: side view RISE cable penetration in steel structure

Mat.: FRR/LEHF+FIWA putty

Ref.: JAB

Date: 03.06.00 Scale:

Rev. 1 08.11.00 JAB

Rev. 2 JAB

R0068E

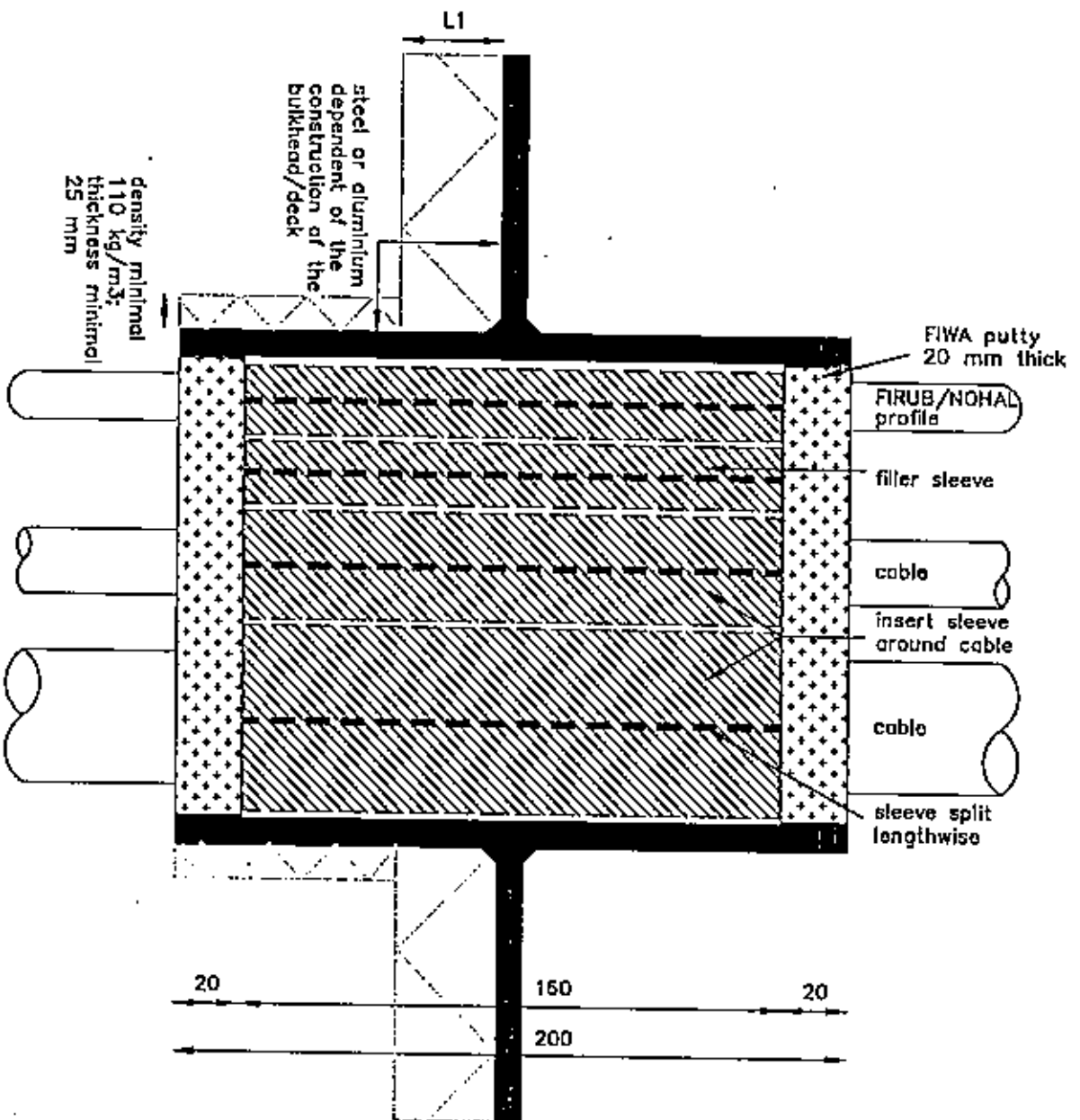
No part of this document may be reproduced by photocopy, print, microfilm or any means without the written permission of BEELE Engineering bv of The Netherlands



A0-A60 penetrations for all types of cables sealed with RISE insert sleeves and FIWA sealing putty



L1 = A-60 approved deck insulation



size aperture 600x300 mm or equivalent of 1800 cm²

tested at full cable fill capacity according to IMO Res. A.754(18)

A0-A60

CABLE PENETRATION

Description: side view RISE cable penetration in steel structure
Mat.: FRR/LEHF+FIWA putty

Ref.: JAB
Date: 03.06.00
Scale:

No part of this document may be reproduced by photocopy, print, microfilm or any means without the written permission of BEELE Engineering bv of The Netherlands

Rev. 1	07.11.00	JAB
Rev. 2		JAB

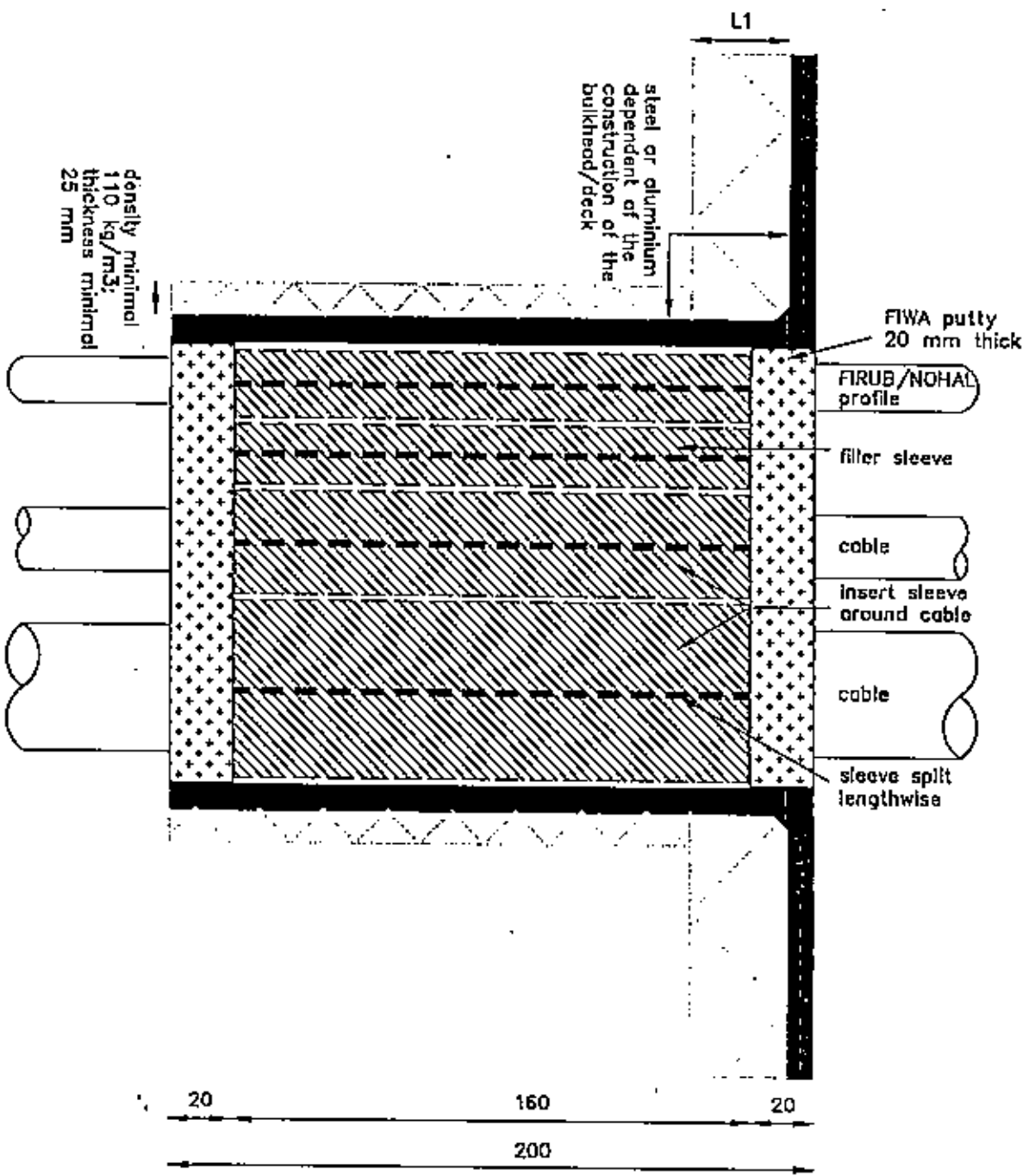
R0069E





L1 = A-60 approved deck insulation

A0-A60 penetrations for all types of cables sealed with RISE insert sleeves and FIWA sealing putty



size aperture 600x300 mm or equivalent of 1800 cm²

tested at full cable fill capacity according to IMO Res. A.754(18)

A0-A60

CABLE PENETRATION



Description: side view RISE cable penetration in steel structure

Mat.: FRR/LEHF+FIWA putty

Ref.: JAB

No part of this document may be reproduced by photocopy, print, microfilm or any means without the written permission of BEELE Engineering bv of The Netherlands

Date:	03.06.00
Rev. 1	07.11.00
Rev. 2	

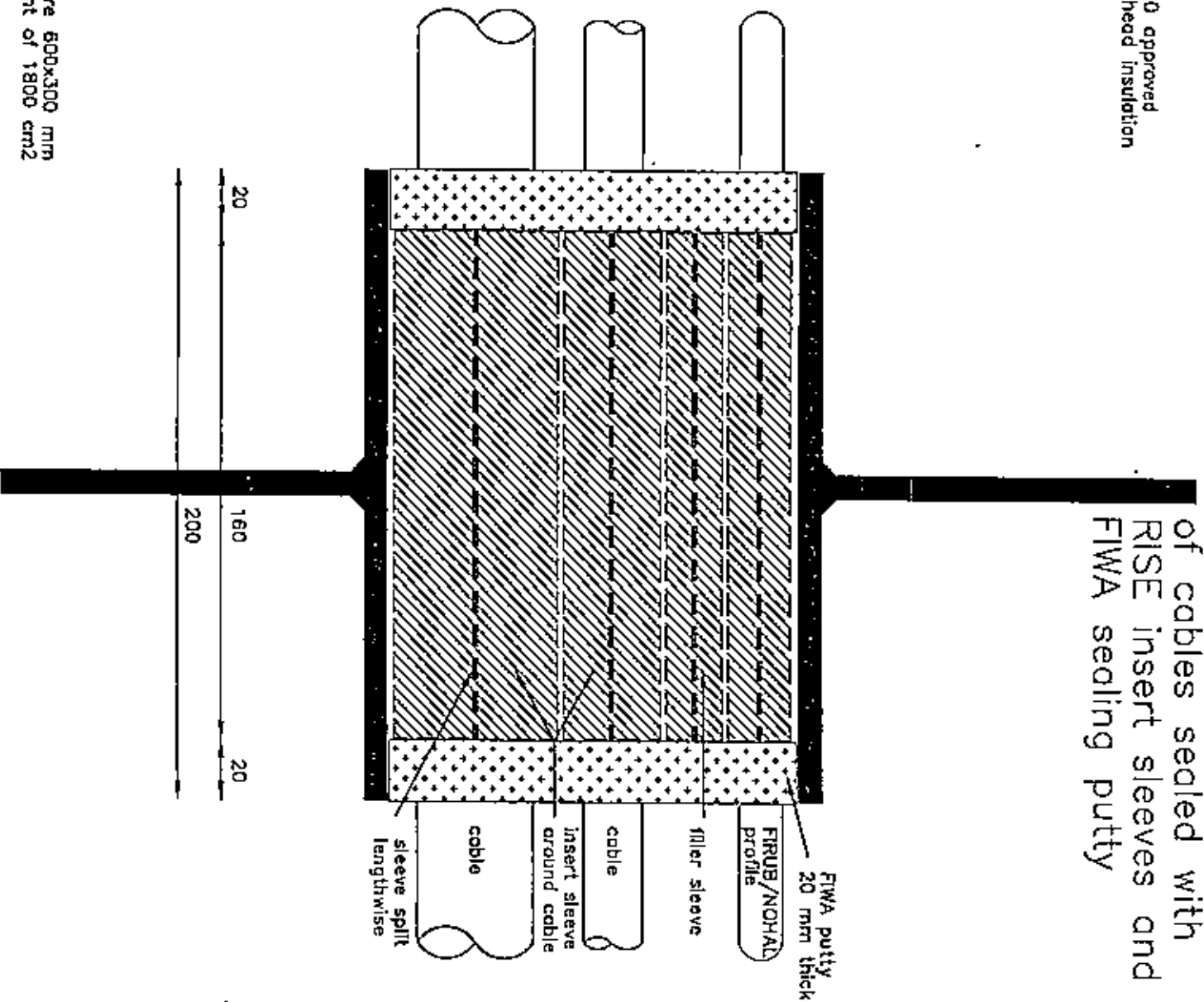
Scale: JAB JAB

R0070E



L1 = A-60 approved
bulkhead insulation

A-0 class
penetrations for all types
of cables sealed with
RISE insert sleeves and
FIWA sealing putty



size aperture 600x300 mm
or equivalent of 1800 cm²

tested at full cable fill capacity
according to IMO Res. A.754(18)

A-0

CABLE PENETRATION

Description: side view RISE cable penetration in steel structure

Mat.: FRR/LEHF+FIWA putty

Ref.: JAB

Date: 04.07.00

Scale:



No part of this document may be reproduced by photocopy, print, microfilm or any means without the written permission of BEELE Engineering bv of The Netherlands

Rev. 1
Rev. 2

JAB
JAB

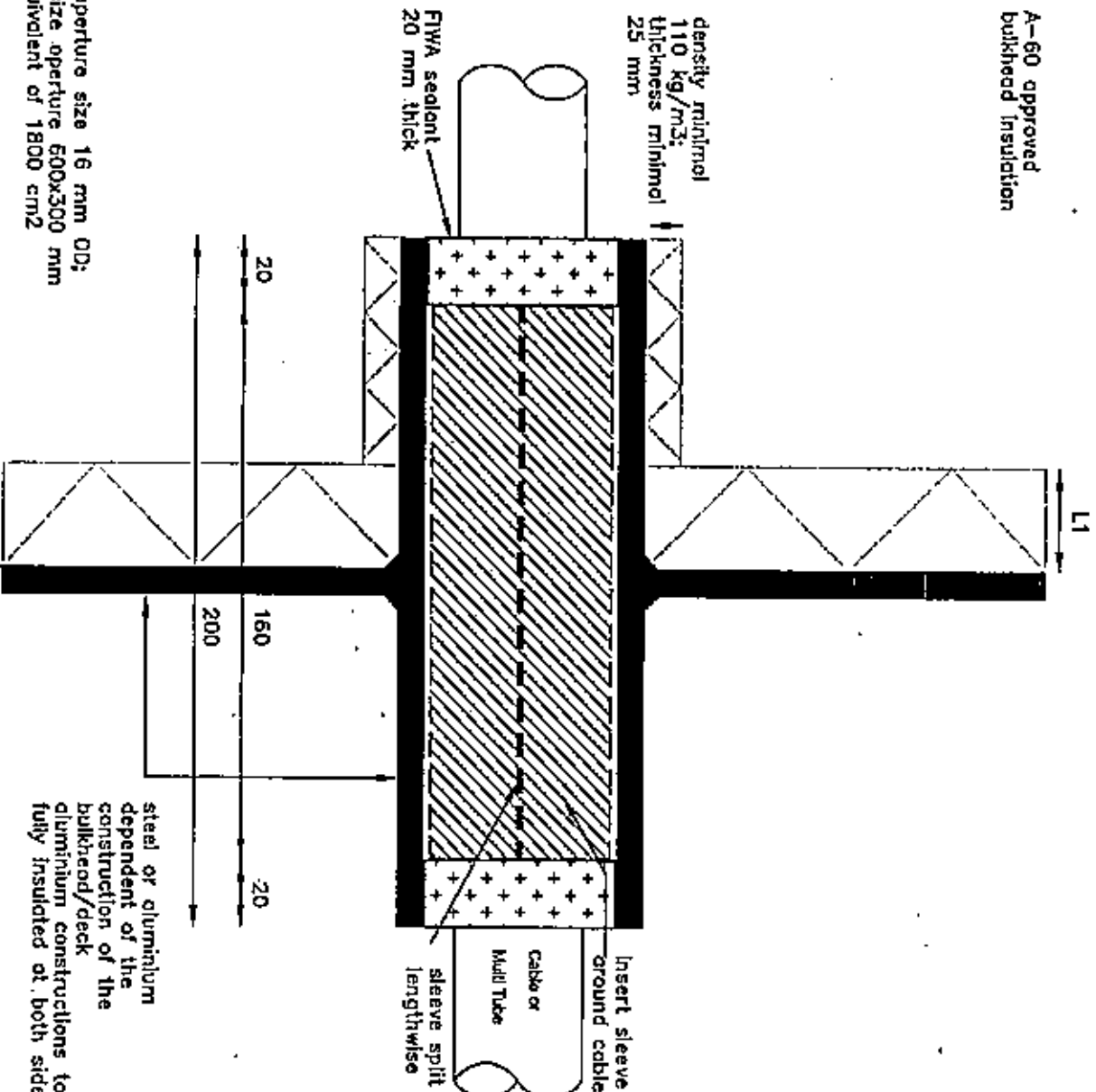
R0096E

RISE

A0-A60 class
penetrations for all types
of cables from 5-85 mm



L1 = A-60 approved
bulkhead insulation



min. aperture size 16 mm OD;
max size aperture 600x300 mm
or equivalent of 1800 cm²

steel or aluminium
dependent of the
construction of the
bulkhead/deck
aluminium constructions to be
fully insulated at both sides

tested according to IMO Res. A.754(18)

A0-A60

Cable & Multi Tube PENETRATION

Description: side view RISE cable penetration

Mot.: FRR/LEHF+FIWA sealant



Ref.: JAB

Date: 22.09.02 Scale:

Rev. 1 JAB

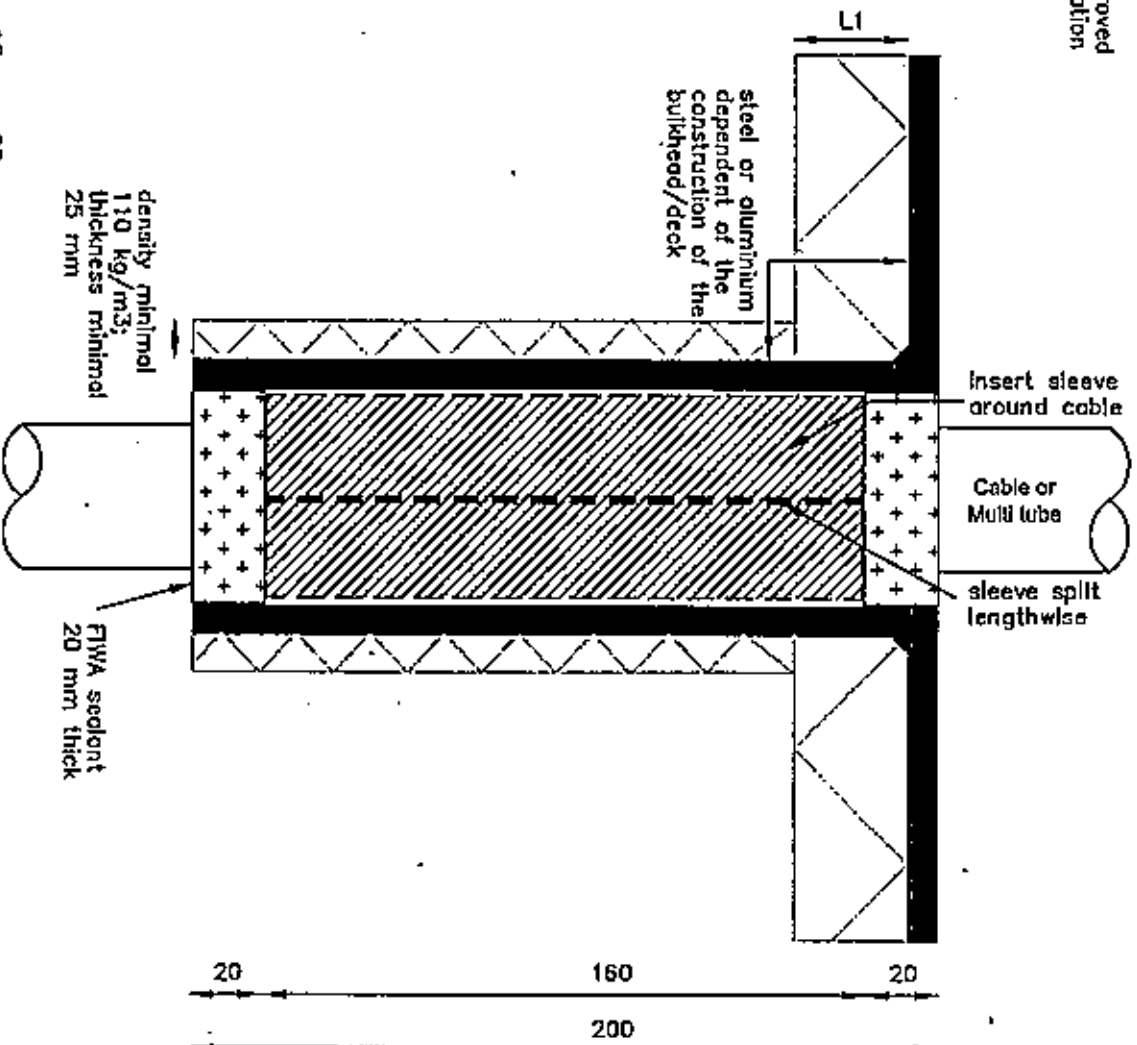
Rev. 2 JAB

R0133E

A0-A60
penetrations for all types
of cables 5--85 mm



L1 = A-60 approved
deck insulation



min. size aperture 16 mm OD;
max. size aperture 600x300 mm
or equivalent of 1800 cm²

density minimal
110 kg/m³;
thickness minimal
25 mm

FIWA sealant
20 mm thick

tested according to IMO Res. A.754(18)

A0-A60

Cable & Multi Tube PENETRATION

Description: side view RISE cable penetration	
Mat.: FRR/LEHF+FIWA sealant	
Ref.: JAB	



Date: 22.09.02	Scale:	JAB	R0134E
Rev. 1		JAB	
Rev. 2		JAB	

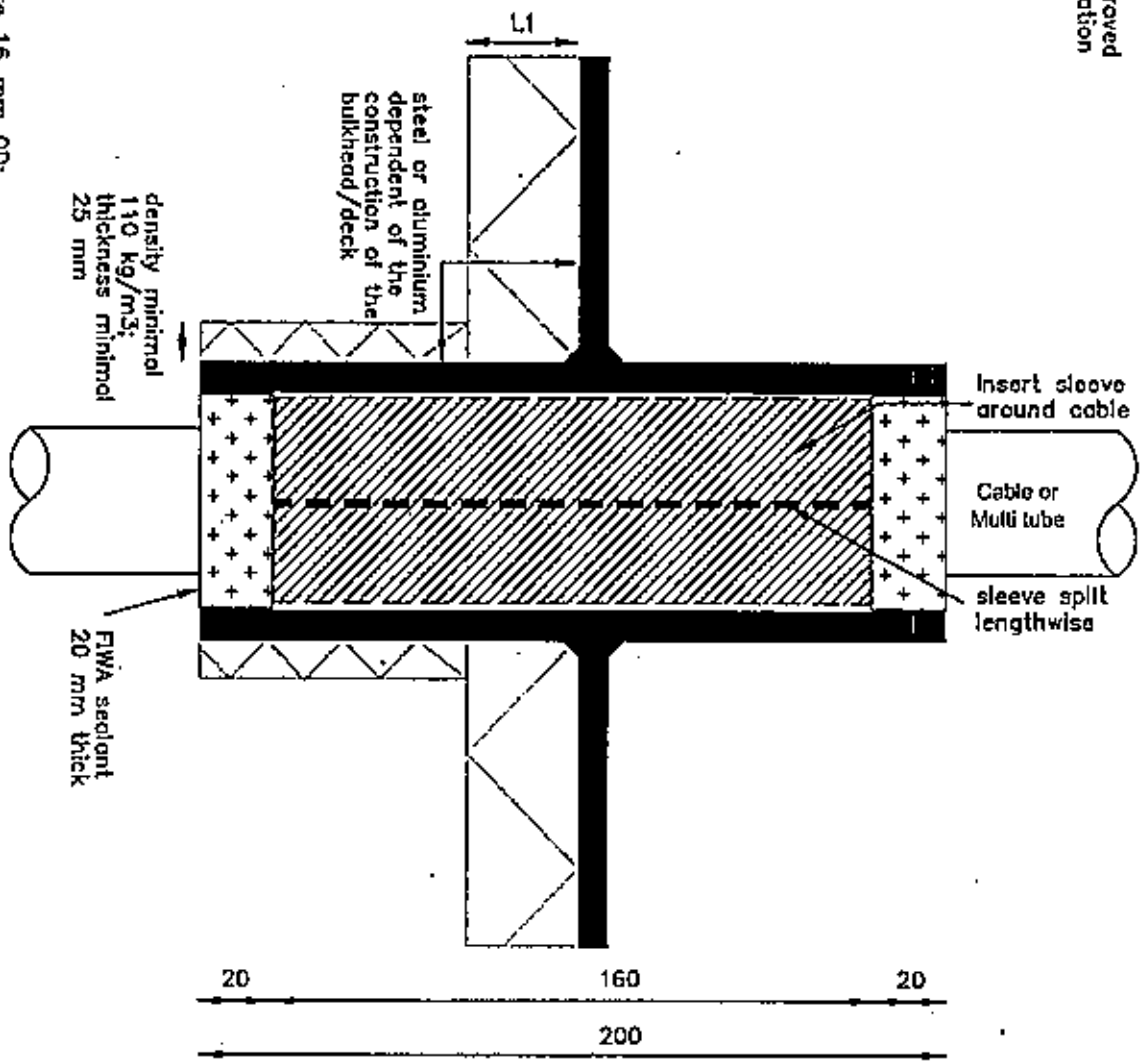
No part of this document may be reproduced by photocopy, print, microfilm or any means without the written permission of BEELTE Engineering by of The Netherlands



A0-A60
penetrations for all types
of cables 5-85 mm



L1 = A-60 approved
deck insulation



min. size aperture 16 mm OD;
max. size aperture 600x300 mm
or equivalent of 1800 cm²

tested according to IAO Res. A.754(18)

A0-A60

Cable & Multi Tube PENETRATION

Description: side view RISE cable penetration

Mat.: FRR/LEHF+FIWA sealant

Ref.: JAB Date: 22.09.02 Scale:

No part of this document may be reproduced by photocopy, print, microfilm or any means without the written permission of BEELE Engineering by of The Netherlands



Rev. 1	JAB	R0135E
Rev. 2	JAB	