

GENERAL COMMERCIAL TERMS TECHNISTONE, a.s.

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PART III/5

MANUAL TRANSLUCENT

MANUAL FOR LIGHTNING OF TRANSLUCENT AND FRESH LINE

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1. Product characteristics

Main raw materials used in Translucent and Fresh lines are clear glass and clear quartz chips. Both production lines can be extended according to customer or Technistone R&D requirements.

Translucent product line:

- Translucent Snow White
- Translucent Ice
- Translucent Onyx

Fresh product line:

- Fresh Orange
- Fresh Red
- Fresh Green

2. Information about product transparency

Major part of materials from Translucent and Fresh lines are translucent, especially in thicknesses 12-20 mm, some of them are translucent also in thickness 30mm.

Product	Transparency – compact lamp 36 W		
	12 mm thickness	20 mm thickness	30 mm thickness
Translucent Ice	very high	high	low
Translucent Onyx	very high	high	low
Translucent Snow White	Low	no transparency	no transparency
Fresh Orange	High	middle	no transparency
Fresh Red	High	middle	no transparency
Fresh Green	High	middle	no transparency

Other new materials with translucent effect can be developed according to customer requirement.

2.1.1. Product characteristics

Translucent & Fresh product are subgroups from main production line Mirrors. Main raw materials are clear glass and clear quartz chips, based on that the product characteristics are the same like characteristics of the Technistone well known line Starlight.

2.1.2. Product usage

Translucent and Fresh products can be used in the same way as Starlight products – slabs or tiles with advantage of translucent effect. All products can be successfully used also without translucent effect.

Types of light sources

Based on provided tests, Technistone recommends fluorescent lamps as the best choice for Translucent and Fresh products. The main reasons are its excellent luminous efficacy, low power consumption, long effective life, low thermal emission and wide range of types. 8 cm is the minimal distance of the product Technistone from the fluorescent lamp. This ensures the spread light. Osram fluorescent lamps were tested in Technistone laboratory.

We recommend: Fluorescent lamps – shade 840 Cool White and colored (R,G,B).
Can be used: Light bulbs. We don't recommend: Halogens.

Influence of light flux: higher light flux provides higher transparency of the product.

In order to achieve best results, please, contact your nearest Light studio or supplier of Osram and Philips lamps (www.osram.com, www.osram.cz, www.majakhk.cz, www.eco-design.cz, www.philips.cz, www.promotech-italia.it).

Halogen light source might be used in special conditions, but it is necessary to solve heat removing by ventilation. Maximum halogen light power 150 W, minimal distance of halogen light from Technistone product is 35 cm. Technistone does not recommend to use halogen light.

3. Recommended light types

Osram Linear lamps – Lumilux T5 HO High Output

Type	Length in mm	Rated wattage in watts	Luminous flux in lumens	Base	Electronic control gear (two-lamp version)
FQ 24W/ 840 HO	549	24	1750	G5	Several types can be used, for example: QT _i 2x14/24/21/39 or QTP5 2x24-39 or QT-M 2x26-42
FQ 39W/ 840 HO	849	39	3100	G5	Several types can be used, for example: QT _i 2x14/24/21/39 or QTP5 2x24-39
FQ 49W/ 840 HO	1449	49	4300	G5	Several types can be used, for example: QT _i 2x35/49/80 or QTP5 2x49
FQ 54W/ 840 HO	1149	54	4450	G5	Several types can be used, for example: QT _i 2x35/49/80 or QTP5 2x54
FQ 80W/ 840 HO	1449	80	6150	G5	Several types can be used, for example: QT _i 2x35/49/80 or QT-EQ 2x80

Compact fluorescent lamps Osram – Dulux L Lumilux

Type	Length in mm	Rated wattage in watts	Luminous flux in lumens	Base	Electronic control gear (two-lamp version)
Dulux L 24W/ 840	317	24	1800	2G1 1	Several types can be used, for example: QT-i 2x14/24/21/39 or QT-M 2x26-42
Dulux L 36W/ 840	411	36	2900	2G1 1	Several types can be used, for example: QT-i 2x14/24/21/39 or QT-M 2x26-42
Dulux L 40W/ 840	533	40	3500	2G1 1	Several types can be used, for example: QT-i 2x14/24/21/39 or QT-M 2x26-42
Dulux L 55W/ 840	535 / 533	55	4800	2G1 1	Several types can be used, for example: QT-i 2x35/49/80
Dulux L 80W/ 840	568	80	6000	2G1 1	Several types can be used, for example: QT-i 2x35/49/80

Compact fluorescent lamps Osram – Dulux F

Type	Length in mm	Rated wattage in watts	Luminous flux in lumens	Base	Electronic control gear (two-lamp version)
Dulux F 18W/ 840	122	18	1100	2G10	Several types can be used, for example: QT-i 2x14/24/21/39 or QT-M 2x26-32
Dulux F 24W/ 840	165	24	1700	2G10	Several types can be used, for example: : QT-i 2x14/24/21/39 or QT-M 2x26-42
Dulux F 36W/ 840	217	36	2800	2G10	Several types can be used, for example: QT-i 2x14/24/21/39 or QT-M 2x26-42

Compact fluorescent lamps Osram – Dulux T/E IN PLUS

Type	Length in mm	Rated wattage in watts	Luminous flux in lumens	Base	Electronic control gear (two-lamp version)
Dulux T/E 42 W/840 IN PLUS	163	42	3200	GX24q-4	Several types can be used, for example: QT - T/E 2x42 - 57 or QT-M 2x26-42
Dulux T/E 57 W/840 IN PLUS	195	57	4300	GX24q-5	QT - T/E 2x42 – 57
Dulux T/E 70 W/840 IN PLUS	235	70	5200	GX24q-6	Ballast for just one light source QT - T/E 1x70

4. Optimisation of light placement for homogenous transparency of Technistone Translucent and Fresh materials

EXPLANATION TO TABLES AND SCHEMATIC LAYOUTS:

- a distance between axes of light sources
- b depth of installation space behind the slab
- reflecting layer mirror or AL foil or stainless can be used ...
- notice: it is important to provide air circulation in installation area in order to protect from overheating of light sources (specially Dulux T/E in Plus)

ONE-BASE LIGHT SOURCES

Osram Dulux L Lumilux

80W/840

cool white	Source size 597mm	
b	a	a (with reflecting layer)
8	12	14
12	17	24

36W /840

cool white	Source size 439mm	
b	a	a (with reflecting layer)
8	12	17
12	16	24

TWO-BASE LIGHT SOURCES – LINEAR

Osram Lumilux T5 HO High Output

54W /840 HO

cool white		
b	a	
8	12	16
12	16	24

80W /840 HO

cool white		
b	a	a (with reflecting layer)
8	16	24
12	24	30

Very effective when the lighting large area.

ONE-BASE SOURCES –COMPACT LAMPS

Osram Dulux T/E in Plus

57W , 70W/840

cool white		
b	a	a (with reflecting layer)
15	24	35
20	35	45

Very effective if installation area is deep.

5. Products usage

Kitchens

Floors

Product: Translucent Ice, Translucent Onyx 12mm

Lights: Linear lamps, cool, white, distance from the slab 5 cm.



Walls

Product: Translucent Ice 12mm

Lights: Fluorescent lamps coloured - R,G,B, distance from the slab: 3 cm.



Reception

Product: Translucent Ice 12mm

Lights: Two-cap linear fluorescent lamp Osram 80W /840 HO, cool white.



Bars

Product: Translucent Ice 12mm

Bar light: One-cap fluorescent compact lamp Osram Dulux T/E in Plus, cool white, sample –black foil

Light: compact light Osram Dulux L Lumilux 36W /840v



Design

Lamps

Product: Translucent Ice, Translucent Onyx 12mm

Lights: Fluorescent lamp, white and coloured, placed in the middle, distance from the slab 15-30 cm.

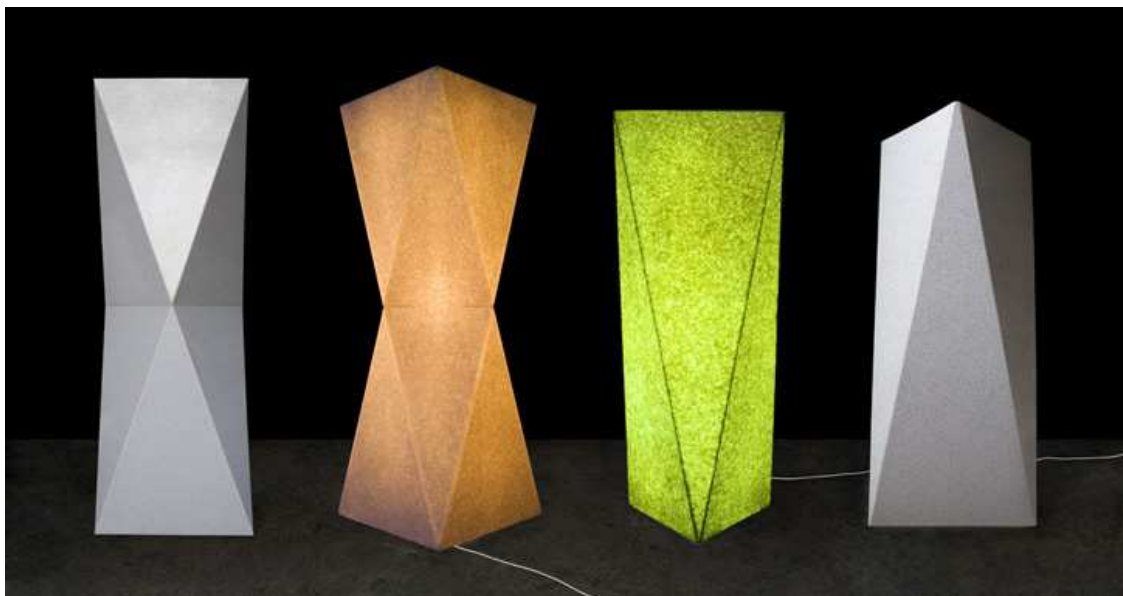
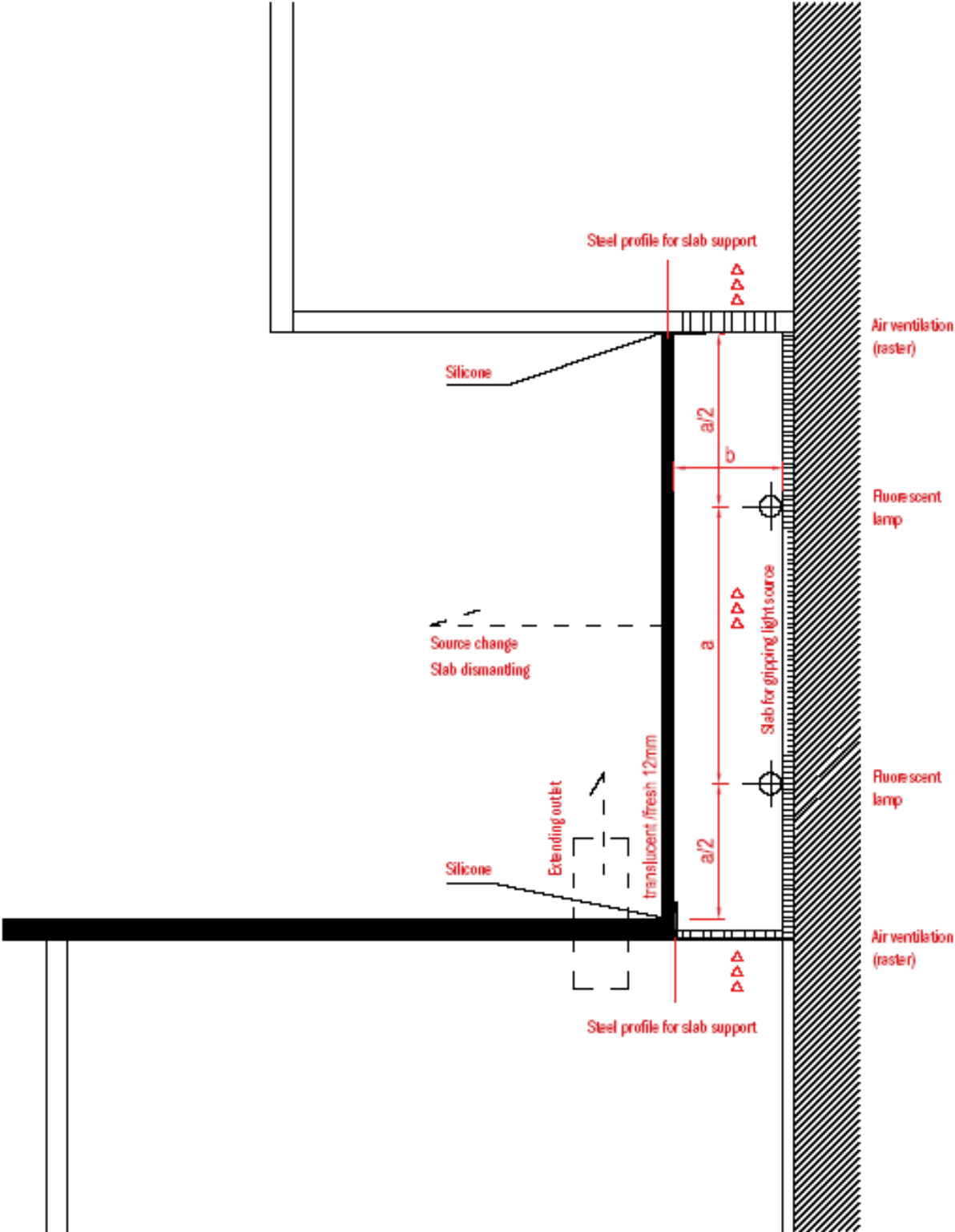


Figure 1: Kitchen – back side



KITCHEN

Figure 2: Kitchen – top box

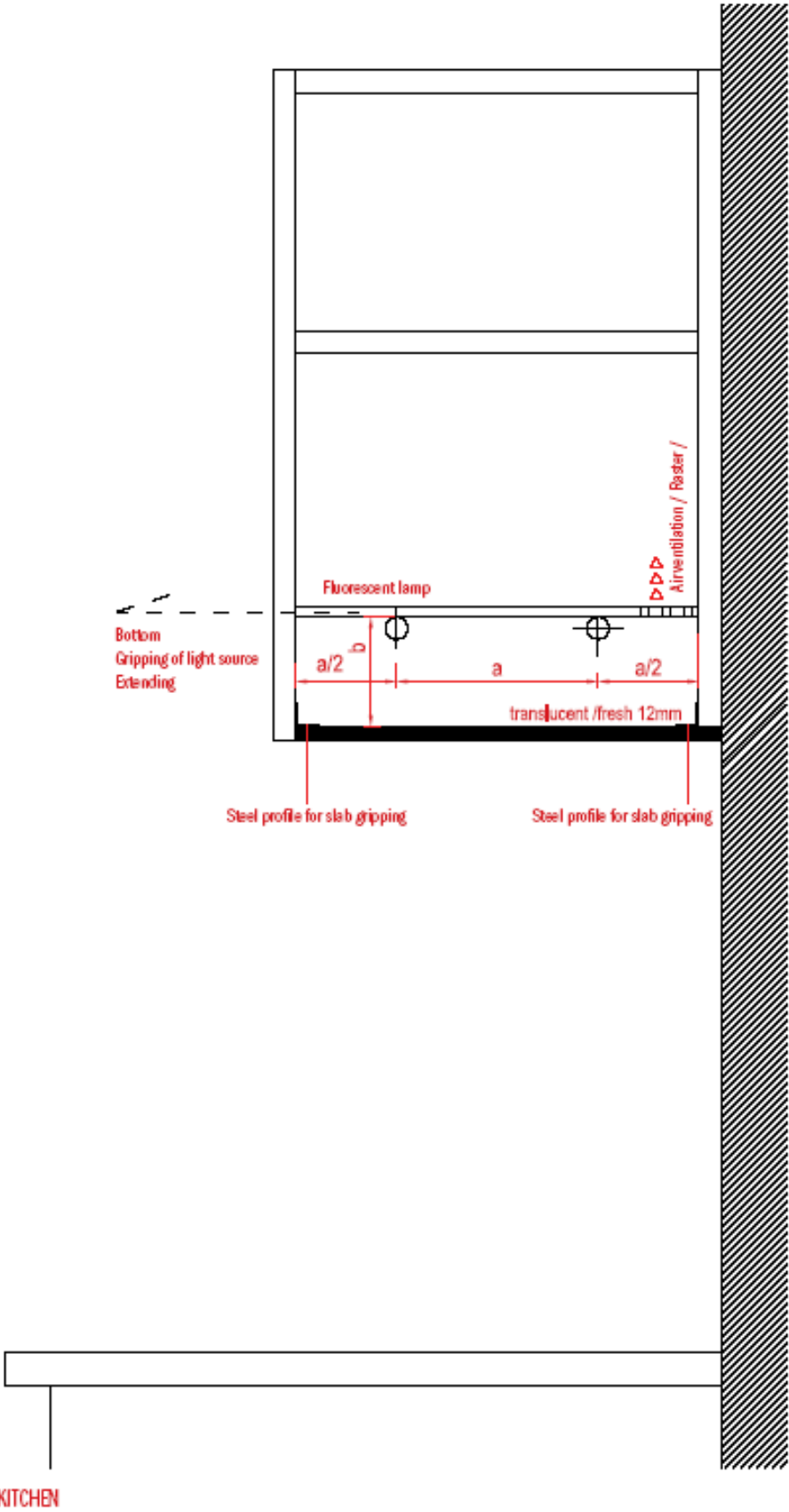


Figure 3: Floor – profile

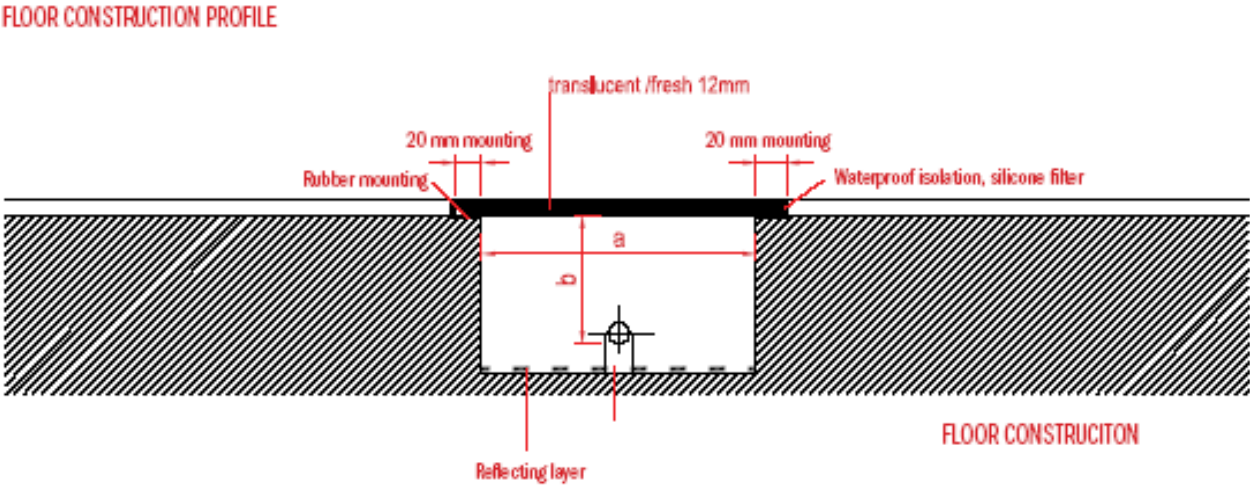
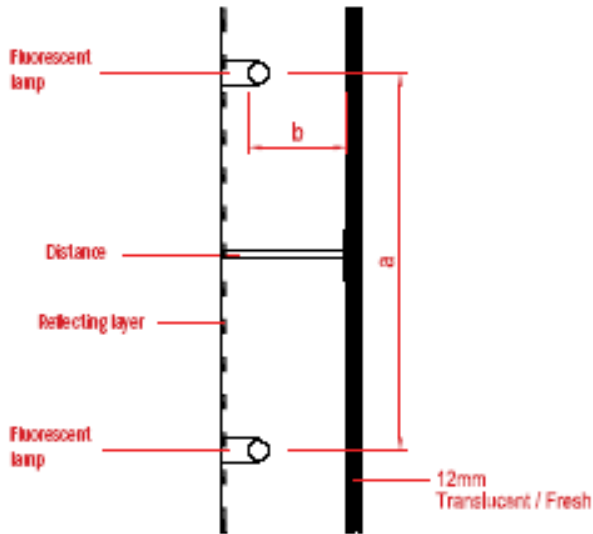
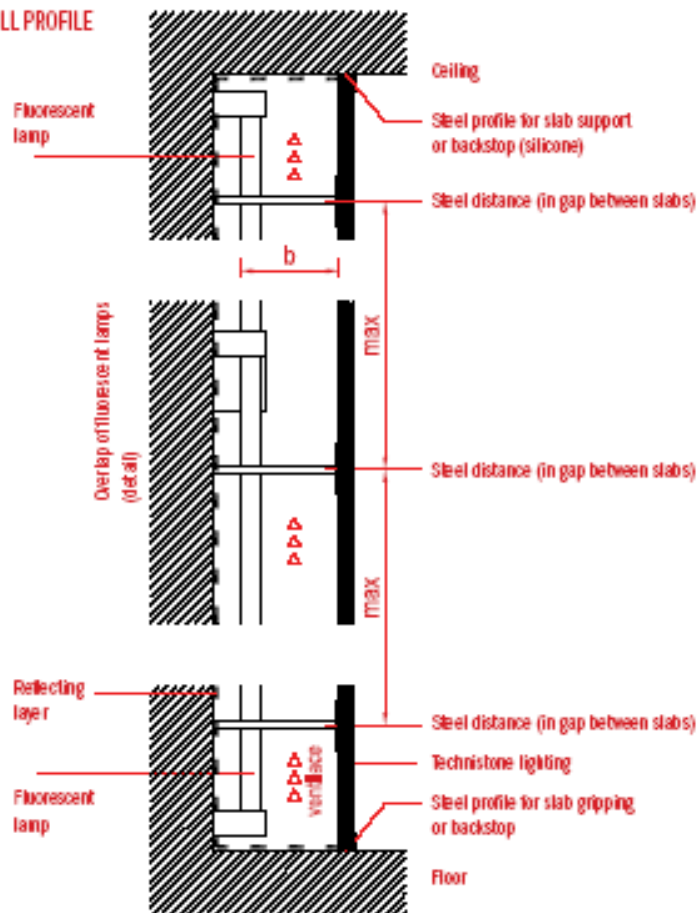


Figure 4: Light wall

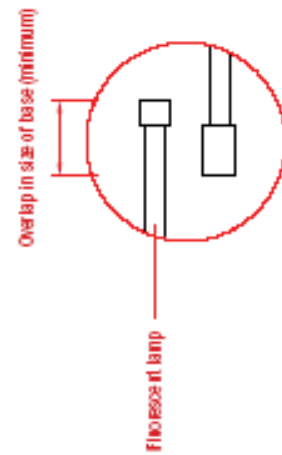
GROUNDPLAN



WALL PROFILE

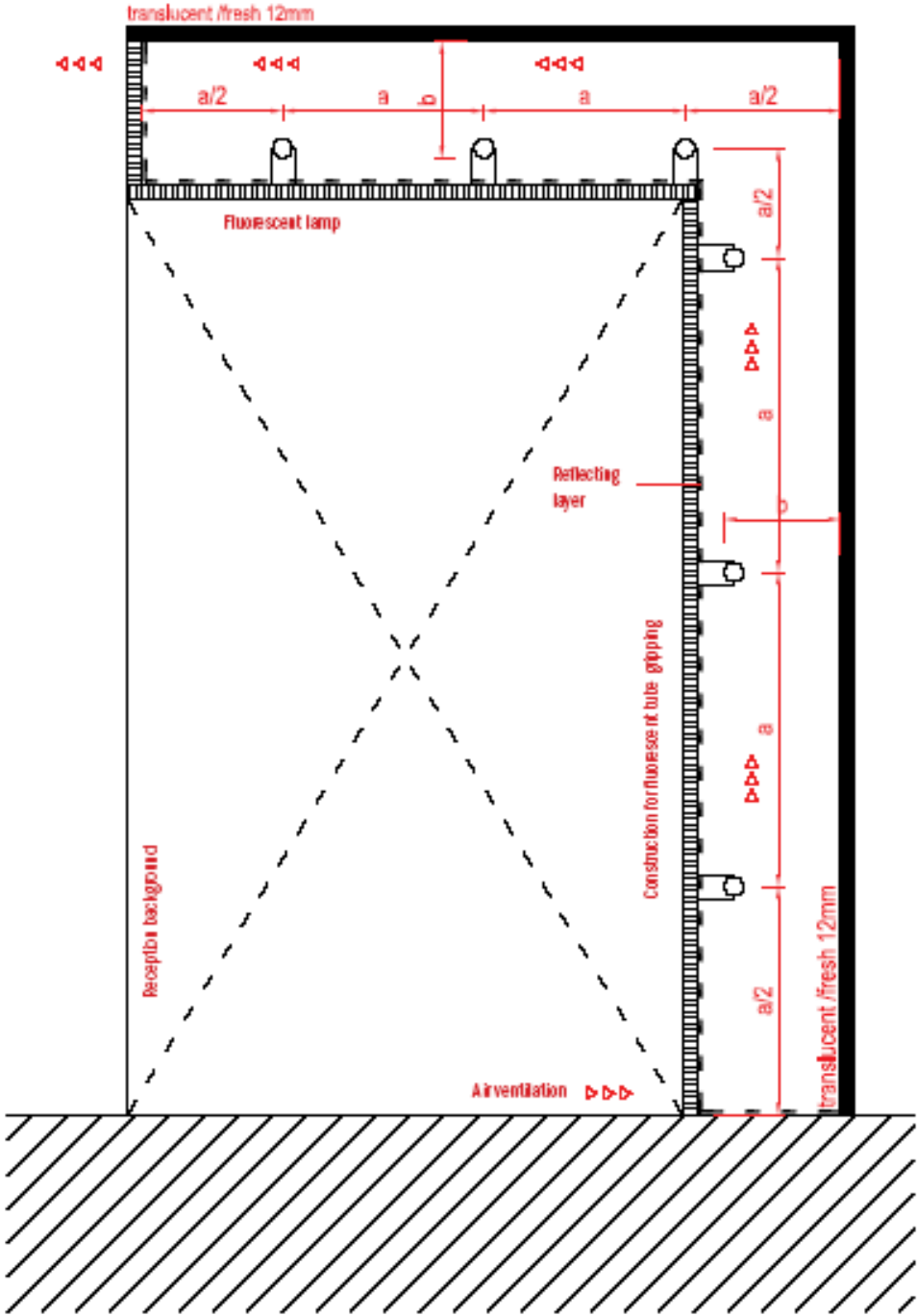


VIEW



LIGHT WALL

Figure 5: Reception – cut



RECEPTION LIGHTING

Figure 6: Reception 2 – cut

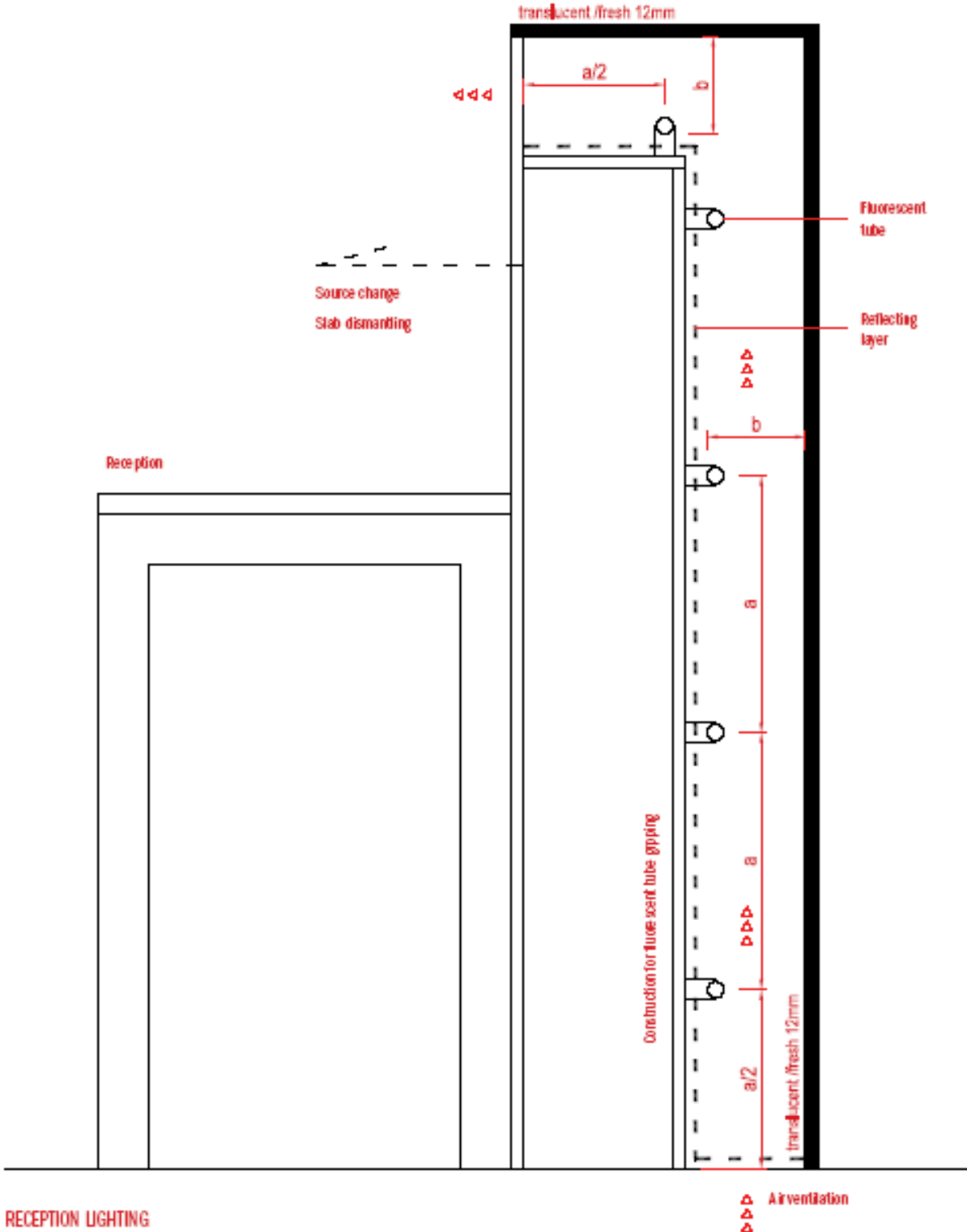
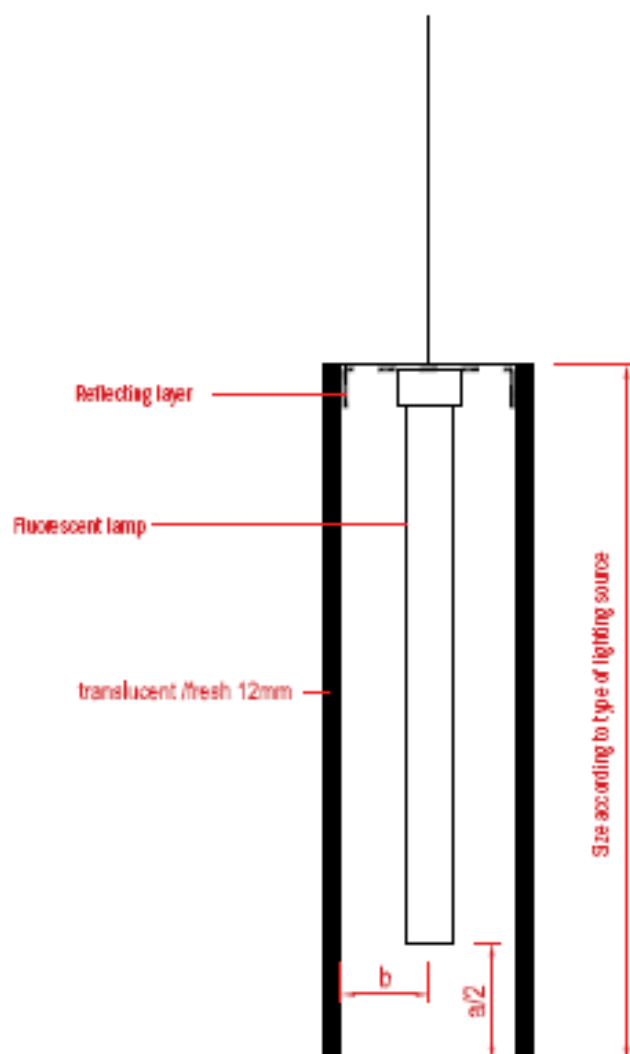


Figure 7: Light



Recommended light source:

One base fluorescent lamp, for example Osram - Dulux L Luminox, coolwhite

Recommended ECG:

QTI 2x35 / 49 / 80

LIGHT