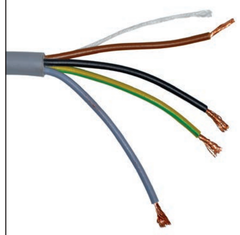
GENERIC

LOCKING CIRCUIT CABLE 4 x 1 YY/LSZH (3184B LSZH)

Q13026

Maximum distance from locking to power supply location:
50 metres for 1 amp lock
30 metres for 2 amp lock

Fail safe locking relies on the locking receiving the correct voltage and current. Fail secure electro-mechanical locking always requires a 3rd core control cable. Only industry reference 4 x 1 YY/LSZH cabling (or Fire Protected equivalent, if applicable) is to be used. Alarm, data or communications cabling; for example; CAT5E, CW1308 is unacceptable.



Conductors:	Flexible copper, class 5.
Core identification:	4 core: brown, grey, black, green/yellow
Insulation:	LSZH
Sheath/Jacket:	LSZH
Colour:	Grey
Voltage:	300/500V
Operating temperature:	-5°C / + 70°C
Minimum bending radius:	6 x overall diameter
Standards:	BS EN 50525-3-11, EN 61034-2, EN 60332-1-2.

CABLE REFERENCE:
4 x 1 YY/LSZH
PER LOCK

Core size sq.mm	No of cores	Radial thickness of insulation mm	Nominal overall diameter mm	Weight kg/km
1	4	0.6	7.9	99

T: 01322-441165 Product ref: 3184B-Grey Part number: 45574 www.batt.co.uk

LSZH 4001P1644-08 COMMS BUS CABLE

CABLE CODE **T**

LONWorks™
LSZH FireFighter® 400 Series
1x2x16awg 600 Volts

Ref: LSZH 4001P1644-08
(-08 = orange but other colours also available)

T: 01279 871150
F: 01279 871129
www.belcom.co.uk

LONWorks™ is a trademark of Echelon Corp.

Conductors:	Stranded tinned copper wire (19/0.30mm). 2 cores twisted into a pair.
Diameter (outer):	6.70mm ± 0.10mm

LOCKING FOR RESIDENTIAL BUILDINGS

The drawings show that 12VDC Fail Safe locking and associated cabling is required on all access controlled doors. It is NOT included in quotations unless expressly stated otherwise. Locking to be supplied by the door company for the following reasons:

SBD New Homes 2014 states “the locking system must form part of the certificated doorset range”.

“Locks that are supplied with the door which have not been tested as part of the particular doorset range, will fall outside the scope of the manufacturer’s certification, and will therefore fail to meet the SBD physical security standards” – which would clearly apply to locks supplied by NACD or any other 3rd party.

NACD advises as follows:

1. The electric locking must always be supplied and installed by the door manufacturer/installer.*
2. The supply/installation of electric locking by any party, other than the door manufacturer at time of manufacture, will result in an inferior locking solution
3. For any locking system to operate correctly, the door(s) must close true each time (door manufacturer/installer must consider all site environmental variables).
4. Electro-magnet locking systems, when not pre-installed in the door rebate, must only be installed on the secure side of the door.
5. Doors must be fit for purpose and fitted with the appropriate door closer, and door stop(s) top and bottom as appropriate.
6. The supply/installation of electric locking after the doors have been supplied to site will be significantly more expensive than at the time of manufacture.
7. Doors on fire escape routes must be clearly marked accordingly.
8. Emergency exit devices must be installed on all escape doors to guarantee emergency exit at all times.
9. Electric locking circuits must only use lock circuit cabling 4-core, 1mm² /core per lock, or Fire Protected equivalent.
10. Do NOT use Shear (pin type) magnets and shoot bolt type locking systems because they are very sensitive to the door closing true each time. The margin of error (tolerance) is very small which makes this type of locking very unreliable.
11. **All locking to be 12VDC FAIL SAFE only.**
12. Electro-mechanical fail secure locking & electric fail secure releases are (a) NOT to be used with battery back-up as not designed to be continuously powered “unlocked” (b) NOT suitable for connection to Fire/AOV system for guarantee “unlock” in the event of emergency.
13. Electro-mechanical fail secure locking does NOT unlock immediately and often causes annoyance to residents.
14. **Never use Fail SECURE locking** – especially on doors that have access control on the ESCAPE FROM side.

IMPORTANT

Any 3rd party attempting to cut a locking device into a metal door/frame will invalidate all warranties. All such works must always be referred back to the door company.

*Avoid glass framed doors as especially difficult to electrically lock.

CABLES CPR COMPLIANT to Cca,S1b,d2,a2 or better

A Class E (CAT6) U/UTP x 4no + Earth 1.5mm² (6491X)

B 3-core 1.5mm² flex cable (3183Y)

C Class E (CAT6) U/UTP + Earth 1.5mm² (6491X)

D Class E (CAT6) U/UTP

E Lock circuit cable ref. 4 x 1 YY/LSZH per lock (4-core, 1mm²/core)

F Class E (CAT6) U/UTP x 2no

G Lock circuit cable ref. 4 x 1 YY/LSZH per lock (4-core, 1mm²/core) + Class E (CAT6) U/UTP x 1no

H RG58 Coaxial LSZH

J LSZH Firefighter® ZHH stranded 21-core copper cable, 1mm² per core, with Y/G negative (www.belcom.com)

K Class E (CAT6) U/UTP + 2-core, 0.75mm²/core (BS4737)

L Alarm cable 8-core, 0.22mm²/core (BS4737)

M Class E (CAT6) U/UTP x 5no

N Class E (CAT6) U/UTP x 10no

R Class EA (CAT6A) F/FTP x 1no

T LSZH 4001P1644-08 x 1no (www.belcom.com)

U Fire rated mains cable FP200H1.5, 3-core

V FP200 (BS5839-1 / Class 1 CU compliant) 1mm²/core cable, 3-core + 1-core Earth. (Red sheaf, brown, grey, black + green/yellow cores)

W 2-core, 0.75mm²/core cable

Y WF100 (CAI Approved)

Z WF 125 (CAI Approved)

Ψ OM3 Multimode 50/125, 4 Core Fibre Optic Cable, Int/Ext Loose Tube/ E-Glass, for 1 Gb/s transmission up to 550 metres.

Ω OM4 Multimode 50/125, 4 Core Fibre Optic Cable, Int/Ext Loose Tube/ E-Glass, for 10 Gb/s transmission up to 400 meters

‡ Single mode pre-terminated armoured fibre cable for TV IRS systems (Global Invacom code G657A)

Ø LSZH Firefighter® 400 low loss flexible 50 Ohm coax (www.belcom.com)

NOTES

Refer to Construction Products Regulations (CPR) - BS6701 and ISO/IEC 11801 – 6: 2017 Part 6: Distributed Building Services (or BS EN 50173-6:2018 Part 6: Distributed Building Services).

1. Only use CPR compliant cabling.
2. Never use BT cable ref. CW1308 for digital video/audio systems.
3. Make sure duct or external grade cable equivalents are used whenever applicable.
4. Any and all installation and system/equipment guarantees relating to correct functionality and reliability only apply if 1st fix cabling, cables used, control equipment locations and mains power requirements are provided strictly in accordance with the site (development) specific drawings supplied by NACD Ltd.

INSTALLATION COMPONENTS MISCELLANEOUS

L01 — RJ45 socket.

L02 — 240VAC Mains Unswitched Fused Spur, 13A.

L04 — Double Pole (DP) momentary NO/NC door release button (fitted within 1 metre maximum distance of the relevant door exit pull/ push handle at a maximum height of 1 metre from FFL). This is NOT an emergency exit device in its own right.

L05 — Green emergency breakglass door release with flip lid (fitted within a 1 metre radius of the door at a maximum height of 1 metre from FFL). Required on all escape routes to comply with Building Control regulations (www.labc.co.uk) if there is no mechanical means of releasing the door. All locking must be 12VDC fail safe.

L06 — EX — Double Pole (DP) momentary NO/NC door release button (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL) + Green emergency breakglass door release with flip lid (fitted within a 1 metre radius of the door at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

L07 — LP — Local 240VAC mains power.

L08 — 12VDC fail safe electric release or electro-magnet (as per advice or pre-installed by door supplier for door type, designation and usage profile).

L09 — 12VDC fail safe electric release or electro-magnet with monitoring contacts (as per advice or pre-installed by door supplier for door type, designation and usage profile).

L10 — P — Proximity keyfob reader (if NACD then anti-clone protected, ID numbered and remotely managed via BATICONNECT.COM cloud for SBD compliance).

L11 — GC — Gate automation control equipment.

L12 — GL — Gate maglock.

L14 — SMATV — Satellite master antenna TV headend.

L15 — Radio receiver for vehicle gates (if NACD then anti-clone protected, ID numbered and remotely managed via BATICONNECT.COM cloud for SBD compliance).

L16 — FS — Fireman switch.

L17 — NACD PSU — NACD 12VDC regulated power supply unit.

L18 — DIG TV MOD — NACD digital modulator for interface of camera picture(s) into TV IRS system.

L19 — DC — Door contact.

L20 — CCTV camera, internal.

L21 — CCTV camera, external.

L22 — vPTZ 360° fisheye lens camera.

L23 — PTZ CCTV fully rotational camera, external.

L24 — KL — Klaxon.

L25 — PC — Computer by others (requires internet access).

L26 — DE — Visitor audio and proximity door entry panel, conventional hardwired. Must be Equality Act 2010 (DDA) & Secured By Design compliant.

L28 — R — Electrical riser.

L29 — FAI — Fire alarm relay interface.

L30 — AOV — AOV alarm relay interface.

L31 — P K — Proximity keyfob reader & Keypad for coded access (if NACD then remotely managed via BATICONNECT.COM cloud).

L32 — K — Keypad for coded access (if NACD then remotely managed via BATICONNECT.COM cloud).

L33 — KS — IPKEYSAFE for secure access controlled storage of mechanical site keys - remotely managed via BATICONNECT.COM cloud.

L34 — T+C — TVCCTV and CCTV camera.

L35 — XHF — EM24EX-HF stainless steel normal exit + HANDSFREE CONTACTLESS + self-resetting latching emergency exit system (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

L36 — Concierge communication device.

L37 — Traffic lights.

L38 — MIL — Underground magnetic induction loop. Underground loop for free vehicle exit connected directly to gate/roller control equipment by automation specialist. If not part of installation, must be advised to access control specialist.

L39 — Video monitor handset (hardwired).

L40 — Audio handset (hardwired).

L41 — EX — EM24EX stainless steel normal exit + self-resetting latching emergency exit system (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

L41A — EX — EM24EX-VR stainless steel self-resetting emergency exit system (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

L42 — CCTV — CCTV Monitor.

L43 — Fire exit route.

L44 — NVR — CCTV control equipment.

L45 — Mechanical locking override device fitted on the internal facing side on the actual door, at a maximum height of 1 metre from FFL, to guarantee safe exit. Can be a thumb turn, lever handle or push-bar as certified appropriate for door type, designation and usage profile (for example, disabled persons).

L46 — XHF — Double Pole (DP) momentary NO/NC door release button + HANDSFREE CONTACTLESS (fitted within 1 metre maximum distance of the relevant door exit pull/ push handle at a maximum height of 1 metre from FFL) + Green emergency breakglass door release with flip lid (fitted within a 1 metre radius of the door at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

L47 — EXP — PROTECTED door release exit button: Double Pole (DP) momentary NO/NC (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). Purpose is to prevent unauthorised activation of the button from the public side, make sure correct model type selected. This is NOT an emergency exit device in its own right.

L48 — VCP — Visitor Call Point (VCP), conventional hardwired video. Must be Equality Act 2010 (DDA) & Secured By Design compliant.

L49 — Keyswitch electrical override for UK Power Network personnel.

L50 — Green breakglass emergency exit device with alarmed plastic cover.

L51 — Powered door actuator plus 12VDC fail safe locking.

L52 — GSM aerial.

L53 — Not on tender schematics. It is recommended to check with client as controlled access may be required.

L54 — 240VAC/13A double power socket

L55 — EXP — Protected (type to prevent unauthorised activation from the public side), EM24EX stainless steel normal exit + self-resetting emergency exit system (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

L56 — Equipment that has been either recommended / waiting on client instructions / not yet quoted / not yet ordered.

L57 — TX — Emergency only, self-resetting latching exit button device (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). Installation must comply with Building Control regulations (www.labc.co.uk) for safe egress.

L59 — M — External GSM data modem.

L60 — IPGUARD® 4G/IP/GSM Smart Visitor door entry & access control panel. Smart technology audio-visual calls to smart phones, tablets, iPads using free IPGUARD APP. Remotely managed via BATICONNECT.COM cloud.

L62 — X — Double Pole (DP) momentary NO/NC 20mm dia s.steel NON LATCHING door release button with yellow plastic ring and yellow illumination. Must always be fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1metre from FFL. Only use with fail safe electric locking. Engraved PUSH TO EXIT (Green), In emergency press and hold exit button while opening door (Red). ONLY USE IN CONJUNCTION with a secondary independent emergency door release system. It is your responsibility to check and ensure your installation complies fully with Building Control regulations (www.labc.co.uk) for emergency safe egress.

L65 — XX OMIT — Reference number only. Door entry / Access control / CCTV equipment shown on previous versions, had been omitted off plans in revised design.

L66 — Monitored green breakglass emergency exit device with alarmed plastic cover.

L67 — G — Gerda Access Control Box (ACB) to provide access to the Fire & Rescue Service through the Gerda One Key® system (Secured By Design Homes 2016, section 27.10). Refer to NACD drawing T12030 for cabling. For all information: www.gerdasecurity.co.uk

L68 — IV — IPVIEW full IP PoE video door entry system.

L71 — W — Wireless networked locking system, handle operated, battery powered. See notes for manufacturer and reference.

COMMUNICATIONS

Remote programming, monitoring and real-time management for visitor door entry, resident access control and CCTV surveillance systems is a requirement for Secured By Design compliance.

NACD's BATICONNECT CLOUD for visitor door entry / resident access control is supplied complete with its own remote connectivity.

Non NACD: If remote connectivity to CLOUD is not included in their package, all third party door entry and access control systems will require broadband with a static IP address to enable remote access. This must be provided by the builder or client. Please check the manufacturer’s specifications for third party system(s) requirements.

CCTV systems: Digital broadband service with static IP address, minimum uplink speed of 2.5Mbps per camera required.

Information required for broadband for CCTV and third party systems:
Router: Username & Password.
Internet Service Provider: Username & Password.
Static IP address: Paperwork showing details.

PROGRAMMING

All programming of NACD proximity keys, radio transmitters, keypad codes and telephone numbers is free of charge within 18 working hours of request for 12 months from the date of handover, **BUT ONLY** if NACD’s BATICONNECT CLOUD system has been installed.

Please check with reference to third party systems.

SPACE / POWER IN RISER
(MINIMUM NATURALLY VENTED)

Hub and communications location:
600mmH x 400mmW x 300mmD x 2no
240VAC/13A unswitched fused spur x 4no
240VAC/13A double power socket x 1no

Secondary door entry, access control and CCTV equipment location(s):
600mmH x 400mmW x 300mmD x 1no
240VAC/13A unswitched fused spur x 2no

TV headend location(s)
240VAC/13A unswitched fused spur x 1no
+ 240VAC/13A double power socket x 1no

All other TV IRS equipment location(s):
240VAC/13A unswitched fused spur x 1no
+ 240VAC/13A power socket x 1no

All control/distribution equipment installed in the riser(s) for door entry, access control, CCTV, TV IRS will each require its own 240VAC / 13A unswitched fused spur. All of these must be on a dedicated electrical circuit, labelled security, which only services the landlord security / TV systems. All riser equipment to be housed in secure metal cabinet(s) / protective enclosure(s), as appropriate, and clearly marked.

External enclosures / cabinets (all disciplines):
If no suitable weatherproof location(s) for system control/distribution equipment are available, site to provide and install externally rated steel lockable enclosures/cabinets (as per dimensions supplied by NACD).

WARNING

Never install any system control / power equipment in false ceilings or in underground cavities.

ACCESS ▪ COMMUNICATIONS ▪ CCTV

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Hertfordshire,
HP2 7FW

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projects@nacd.co.uk
www.nacd.co.uk

SMART TECHNOLOGY VISITOR DOOR ENTRY PANELS

IPGUARD 4G/IP/GSM Smart Visitor Door Entry Panels, BATICONNECT.COM CLOUD

IPGUARD range of fully 4G/IP/GSM enabled video door entry panels with:

- Anti-vandal BS316 stainless steel
- 4G/IP/GSM communications
- Calls up to 3 landline or mobile numbers per dwelling
- Cloud based programming – no software required
- Illuminated colour digital display
- High resolution camera, viewable on Apple & Android smartphones and tablets using the free app
- Integral proximity reader
- Equality Act 2010 compliant
- Large 15.6mm dia. braille embossed buttons with 8mm illuminated digits
- Voice output messages, visual icon messages
- 3000 call capacity
- Mobile Access™
- Friends and family feature
- Dedicated tablet feature

IPGUARD PRO (FLUSH)
Backbox: 335H x 142W x 60D mm
Facia and flange: 390H x 200W mm

IPGUARD PRO (SURFACE)
355H x 165W x 80DB x 110DT mm

IPGUARD MINI

Backbox: 245H x 95W x 45D mm
Facia: 270H x 120W x 14D mm

IPGUARD MINI PLUS PRCM FLUSH FLANGED
BS316 stainless steel
Backbox 360H x 136W x 80D mm
Facia with flange 390H x 166W mm

IPGUARD MINI PLUS PRCM SURFACE
BS316 stainless steel
349H x 127W x 73D mm

IPGUARD MINI PLUS PRCM HOODED SURFACE / POST MOUNT
BS316 stainless steel
349H x 127W x 73DB x 100DT mm

EXIT DEVICES

EM24EX SELF-RESETTING EMERGENCY EXIT SYSTEM

EM24EX + 1FL
Flush

EM24EX + 1SL
Surface

EM24EX + 1HS
Hooded Surface

EM24EX stainless steel normal exit + self-resetting emergency exit system (fitted within 1 metre maximum distance of the relevant door exit pull/push handle at a maximum height of 1 metre from FFL). All locking must be 12VDC fail safe.

EMEX-FL BREAKGLASS

EMEX-FL

Emergency door exit breakglass unit with flip lid.

Dimensions code: 93mmH x 89mmW x 60mmD

EX-MUSH-F EXIT BUTTON

EX-MUSH-F

Exit button "Mushroom" type, flush mount s.steel internal.

Max distance from door handle = 1m.
Max height AFFL = 1m.

Dimensions:
① EX-MUSH-PL 85mmH x 85mmW x 30mmD button
② 1G 75mmH x 75mmW x 53mmD

FIREMAN SWITCH

FS5-F

Fireman switch, flush with key

Dimensions code: 1F

Standard pattern drop-key used by the fire services.
The key is NOT supplied by NACD.

REGULATIONS:
Compulsory, must be fitted on every vehicle entrance that is a designated fire brigade access route.
Not compulsory for communal pedestrian entrance doors.

PROXIMITY READERS

PX11

PX11-1GF FLUSH

PX11-1GS SURFACE

PX11-125F FLUSH FLANGED

PX11-MK1G-BSS
brushed stainless colour finish

PX10

PX10-F
Flush flanged

PX10-S
Surface

PX10-HS
For posts

LPTRS

LPTRS
For lifts

ACCESS PASSES

KCP4V PROX KEYFOB

Front

Back

KCP4V

MIFARE proximity key. Visibly ID numbered.

Dimensions: 45mmL x 35mmW x 5mmD

TEL433 RADIO TRANSMITTER

Front

Back

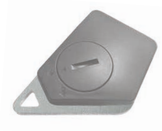
TEL433

Visibly ID numbered.

Dimensions code: 63mmL x 40mmW x 12mmD
Battery: Panasonic CR2032

TEL8G RADIO TRANSMITTER

Front



Back

TEL8G

Visibly ID numbered.

Dimensions code: 66mmL x 46mmW x 12mmD
Battery: Panasonic CR2032

PANEL DIMENSIONS (mm)

SURFACE HOUSINGS

MODEL	DIMENSIONS			
	Height	Width	Depth (bottom)	Depth (top)
1S	120	104	73	
1SL	158	108	73	

SURFACE HOODED HOUSINGS

MODEL	DIMENSIONS			
	Height	Width	Depth (bottom)	Depth (top)
1HS80	158	108	80	100
1HS	158	108	73	100

FLUSH BACKBOXES AND FLANGES

MODEL	ACTUAL BACKBOX SIZE*			FACIA WITH FLANGE	
	Height	Width	Depth	Height	Width
1F	130	113	80	160	143
1FL	169	118	80	199	148

*ALWAYS ALLOW AN EXTRA 5MM ON ALL SIDES WHEN CUTTING OUT FOR FLUSH BACKBOXES

POSTS

Model	Dimensions of base	Height from base to centre of mounting plate
POSTC	190 x 190	1.15m
POSTL	320 x 320	2.2m
POSTV	320 x 320	1.60m
POSTCL	320 x 320	Car 1.15m, Lorry 2.2m

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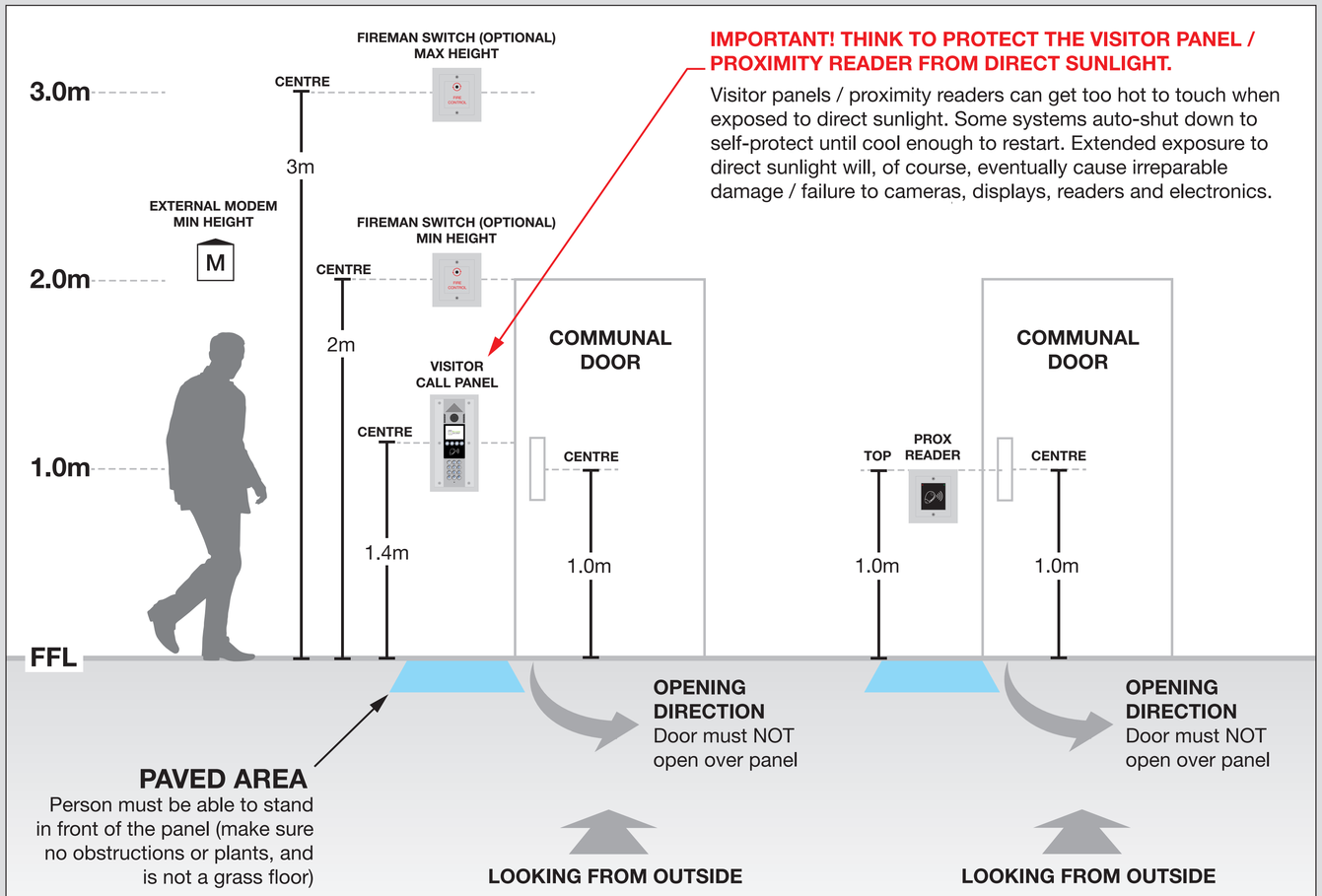
www.nacd.co.uk

For specification sheets and dimensions, please visit www.nacd.co.uk

LEGEND

FIXING HEIGHTS (actual location to be determined by architect / site)

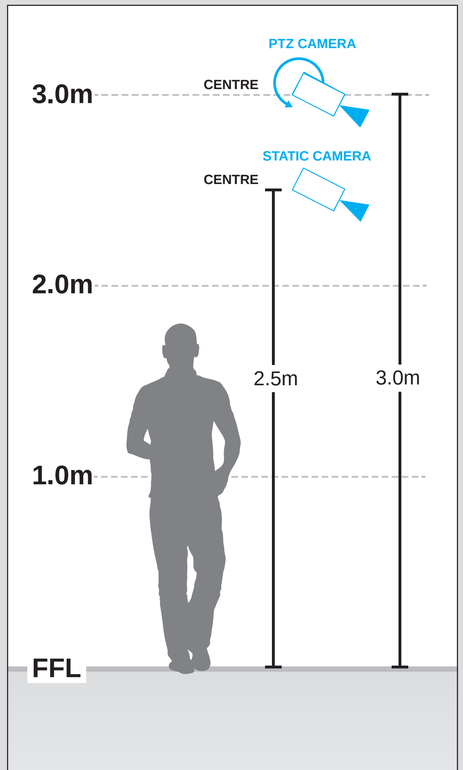
ENTERING



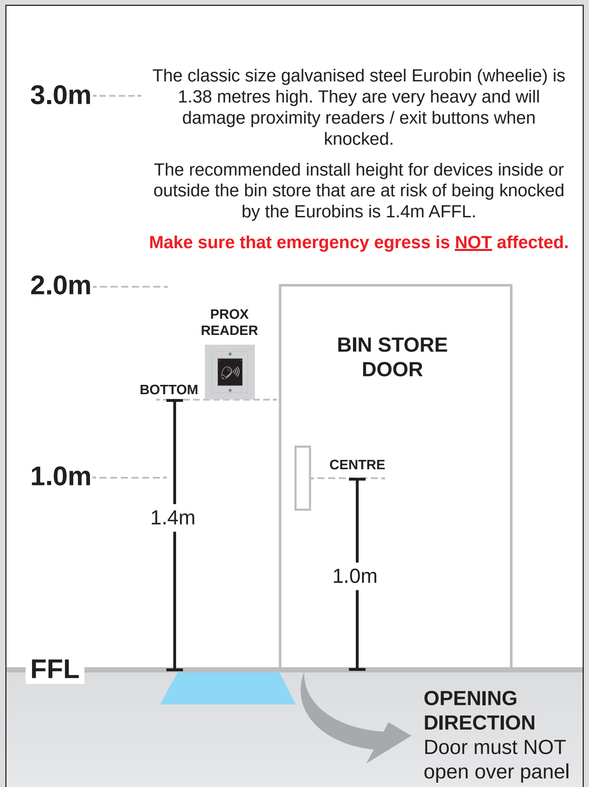
IMPORTANT! THINK TO PROTECT THE VISITOR PANEL / PROXIMITY READER FROM DIRECT SUNLIGHT.

Visitor panels / proximity readers can get too hot to touch when exposed to direct sunlight. Some systems auto-shut down to self-protect until cool enough to restart. Extended exposure to direct sunlight will, of course, eventually cause irreparable damage / failure to cameras, displays, readers and electronics.

CCTV CAMERA



BIN STORE ACCESS CONTROL

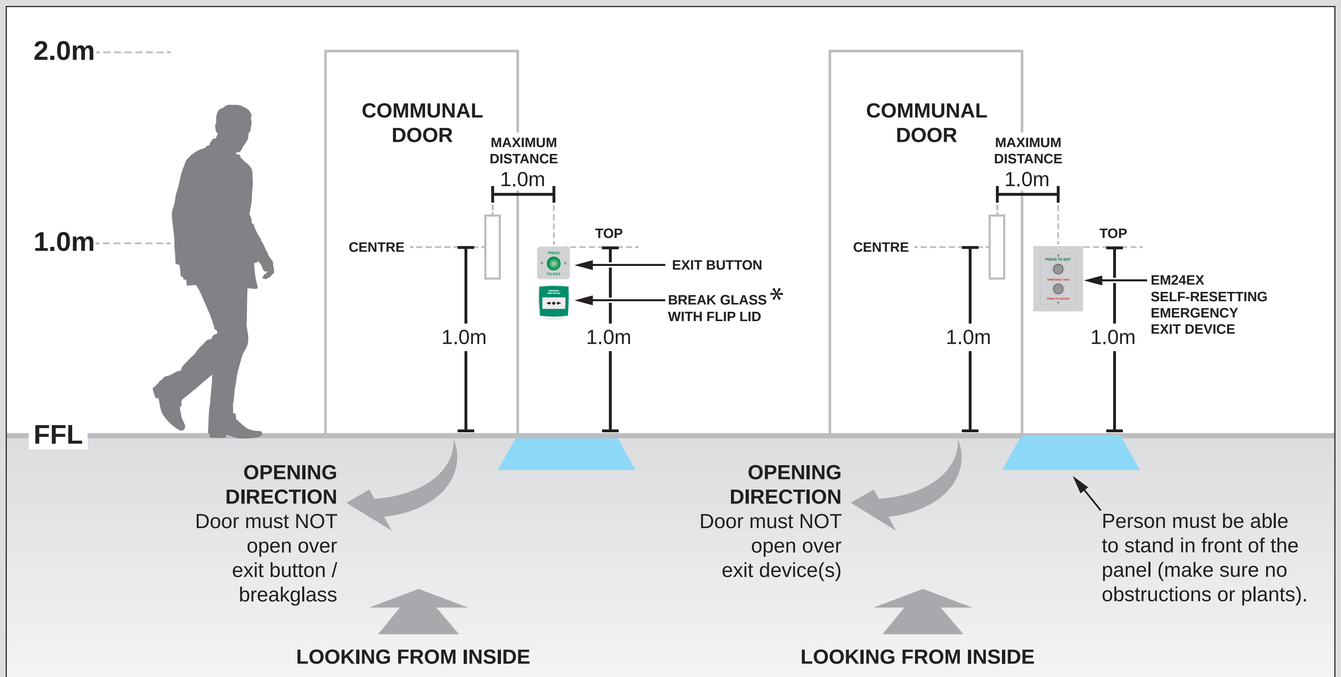


The classic size galvanised steel Eurobin (wheelie) is 1.38 metres high. They are very heavy and will damage proximity readers / exit buttons when knocked.

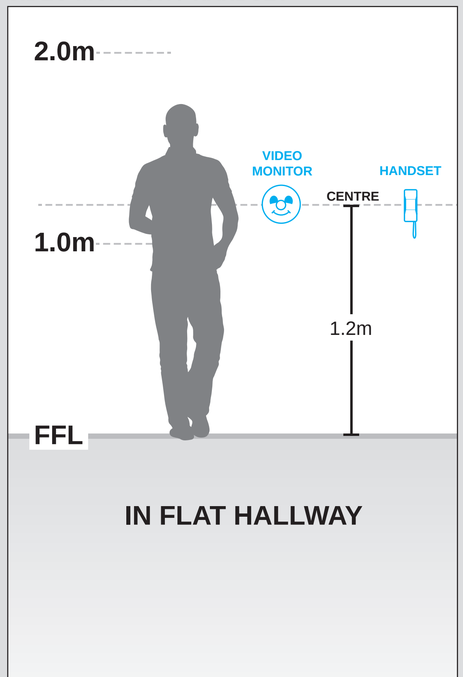
The recommended install height for devices inside or outside the bin store that are at risk of being knocked by the Eurobins is 1.4m AFFL.

Make sure that emergency egress is NOT affected.

EXITING



VIDEO MONITOR / HANDSET



* A NOTE ON BREAKGLASS POSITION

Sometimes, for security reasons, the breakglass (BG) cannot be located close to the door. The 1.0 m max distance from door handle does NOT apply to the BG because when it is activated the fail safe locking stays unlocked until it is reset. The BG must, however, be located so that it is impossible to miss – which means easy to see and activate by all persons exiting in an emergency.

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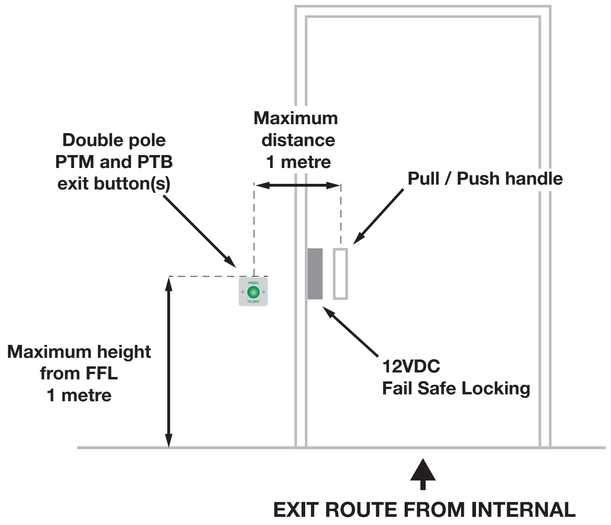
GENERIC LEGEND

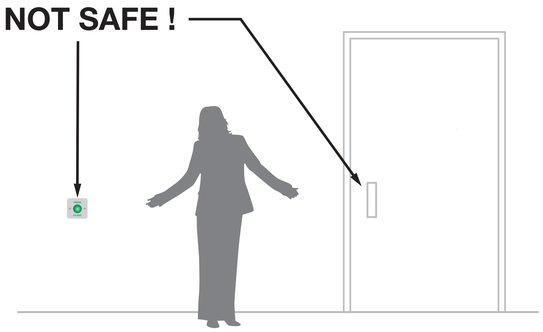
IMPORTANT SAFETY WARNING

The mechanical Push to Break (PTB) safety features on the exit button(s) ONLY WORK if the door can be pulled / pushed open whilst holding the button pressed in.

T13032-1



HEALTH & SAFETY WARNING



If a person cannot reach the exit button AND the door handle at the same time, the safety PTB poles of the button are USELESS. The installation is unsafe and dangerous.

THINK SAFETY, THINK FIRE, THINK EMERGENCY EXIT. LIVES DEPEND ON A CORRECT INSTALLATION.

REPORT NON-COMPLIANT INSTALLATIONS IMMEDIATELY.

LIVES DEPEND ON IT!

ALWAYS CHECK THAT WHEN A BUTTON IS PUSHED AND HELD DOWN THE DOOR STAYS UNLOCKED AND DOES NOT RE-LOCK. ALL INSTALLATIONS MUST COMPLY WITH BUILDING CONTROL REGULATIONS.

WARNING! A PTM/PTB* DOUBLE POLE EXIT BUTTON ONLY IS NOT AN ACCEPTABLE REPLACEMENT FOR A GREEN BREAKGLASS.

T13032-0-3

Clause 2.17 of Part M (Access) of the Building Regulations, Section J: "the operation of switches, outlets and controls does not require the simultaneous use of both hands, except where this mode of operation is necessary for safety reasons."

You cannot have a system where the only emergency exiting procedure requires that the person needs to hold in a button, and at the same time pull/push the door because some people (elderly, physically impaired, children etc) will not be capable of doing this.

Also, if the distance from the exit buttons to the door makes this physically impossible (too far apart) to press in the button and push/pull the door simultaneously, the installation is obviously flawed and unsafe for everyone.

The emergency exit button MUST when pressed in the normal way ie pressed and immediately released also latch the door unlocked for a period of minimum 3 minutes. Each time the emergency exit button is pressed and immediately released it must "hold the door unlocked" for a minimum period of 3 minutes.

NOT ALLOWED

NOT SAFE AND NOT BUILDING REGULATIONS COMPLIANT

*PTM = Push to make momentary contacts = Convenience feature only.

PTB = Push to break momentary contacts = Safety feature.

EQUIPMENT ORIENTATION

FIT VERTICALLY

VISITOR PANELS / PROXIMITY READERS / EXIT DEVICES ARE DESIGNED TO BE FITTED VERTICALLY IE. UPRIGHT NOT AT AN ANGLE!

NACD EXCLUDE ALL RESPONSIBILITY FOR DAMAGE TO PANEL ELECTRONICS CAUSED BY CONDENSATION WITHIN 3RD PARTY POSTS. ALSO, IF PANEL AGAINST ADVICE FITTED AT AN ANGLE, IT MUST BE UNDER COVER SO PROTECTED FROM DIRECT RAIN / SNOW / SUN.

CORRECT POSITIONING OF EXIT BUTTON(S) IS VITAL

T13032-0-2

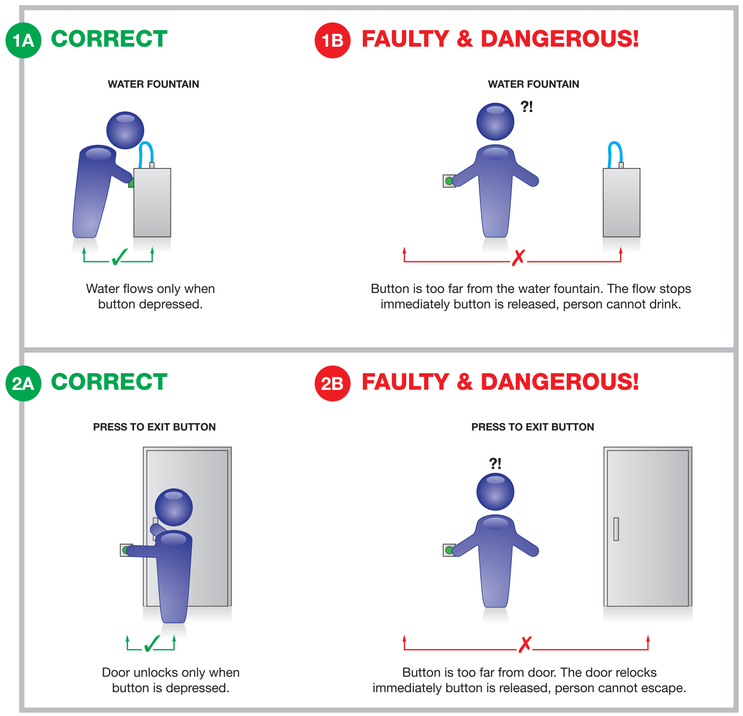
The PTB (Push to Break) contacts on the button break the 12VDC Fail Safe lock power circuit but only when the button is pressed in.

The instant the button is released, the 12VDC Fail Safe lock is immediately re-powered and the door immediately locks.

If the person cannot both press the button in and push or pull the door open at the same time, the installation is dangerous.

WARNING: Must be fitted within 1 metre maximum distance of the door exit pull/push handle at a maximum height of 1 metre from FFL.

Position carefully so that door does not open OVER the exit button(s).



WARNING:

IT IS YOUR RESPONSIBILITY TO CHECK AND ENSURE THE INSTALLATION COMPLIES FULLY WITH BUILDING CONTROL REGULATIONS FOR EMERGENCY SAFE EGRESS (WWW.LABC.CO.UK).

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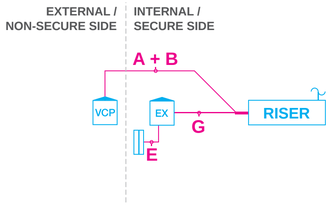
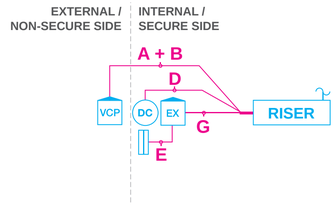
VISITOR CALL POINTS – TYPICAL INSTALLATION SCHEMATICS

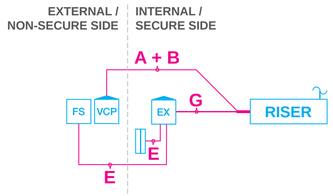
Code: A
Visitor Call Panel



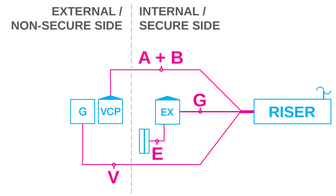
Code: A1
Visitor Call Panel + Door Contact



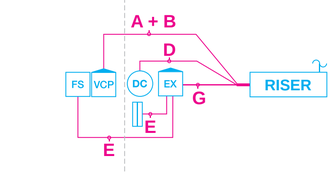
Code: A2
Visitor Call Panel + Fireman Switch



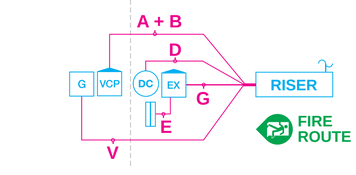
Code: A3
Visitor Call Panel + Gerda box



Code: A4
Visitor Call Panel + Fireman Switch + Door Contact

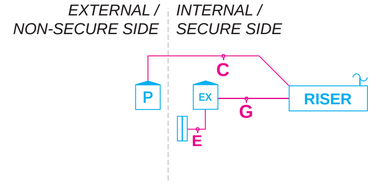


Code: A5
Visitor Call Panel + Gerda Box + Door Contact

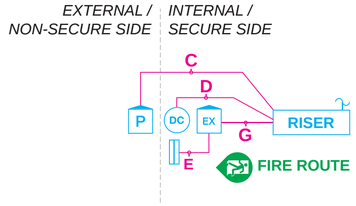


PROXIMITY READERS – TYPICAL INSTALLATION SCHEMATICS

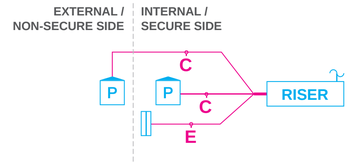
Code: B
Prox Door



Code: B1
Prox Door + Door Contact

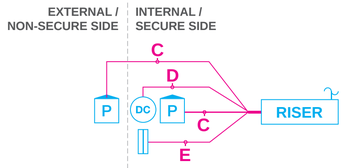


Code: C
Double Prox Door



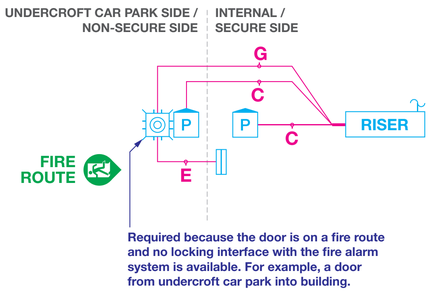
DOOR IS NOT ON A FIRE ROUTE

Code: C1
Double Prox Door + Door Contact



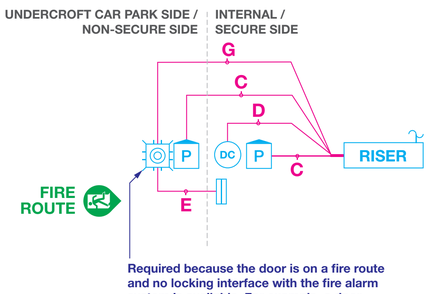
DOOR IS NOT ON A FIRE ROUTE

Code: C2
Double Prox Door + Alarmed Breakglass



Required because the door is on a fire route and no locking interface with the fire alarm system is available. For example, a door from undercroft car park into building.

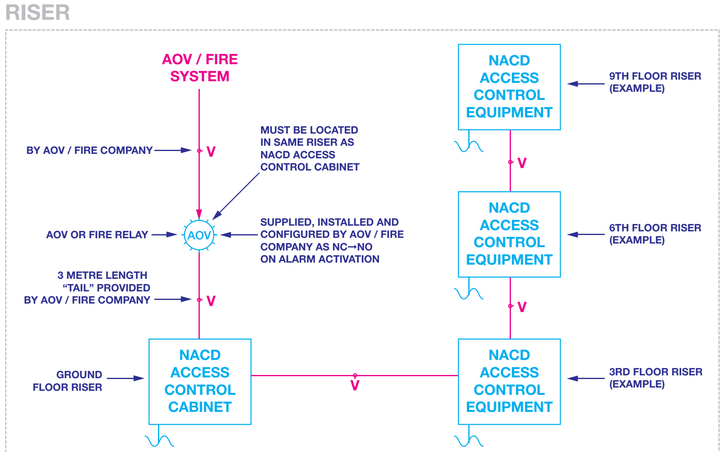
Code: C3
Double Prox Door + Door Contact + Alarmed Breakglass



Required because the door is on a fire route and no locking interface with the fire alarm system is available. For example, a door from undercroft car park into building.

INTERFACING LOCKING WITH AOV SYSTEM

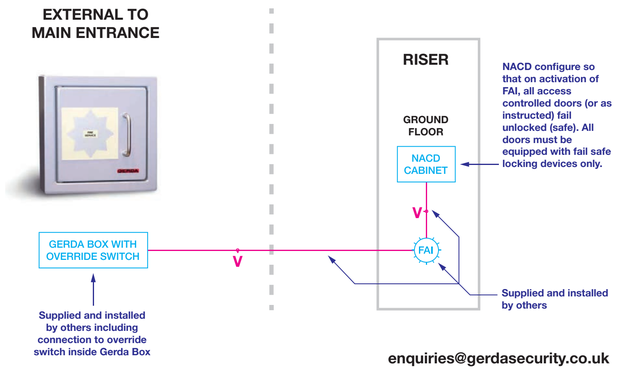
T13500



V = FP200 (BS5839-1 / Class 1 CU compliant) 1mm²/core power cable, 3-core + 1-core Earth. (Red sheaf, brown, grey, black + green/yellow cores)

GERDA BOX (ACB)

T12030



FAI Fire alarm relay interface. L29

V FP200 (BS5839-1 / Class 1 CU compliant) 1mm²/core cable, 3-core + 1-core Earth. (Red sheaf, brown, grey, black + green/yellow cores)

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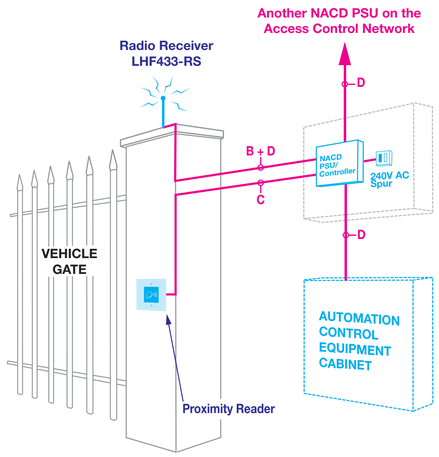
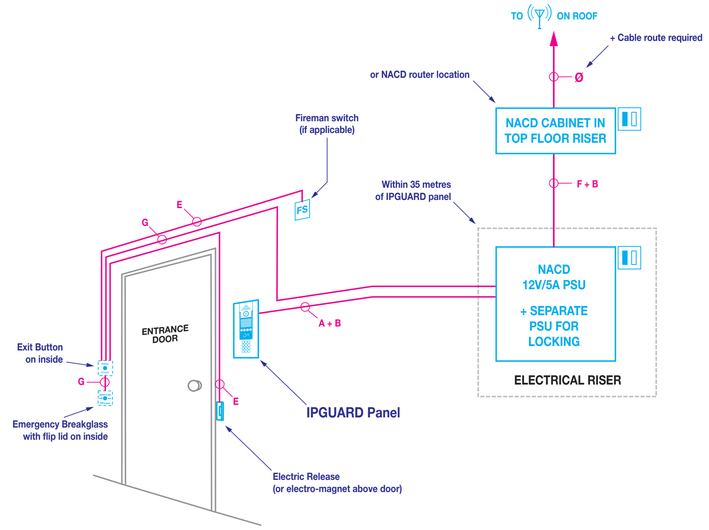
RADIO RECEIVER & PROXIMITY READER INSTALLATION.

T12014

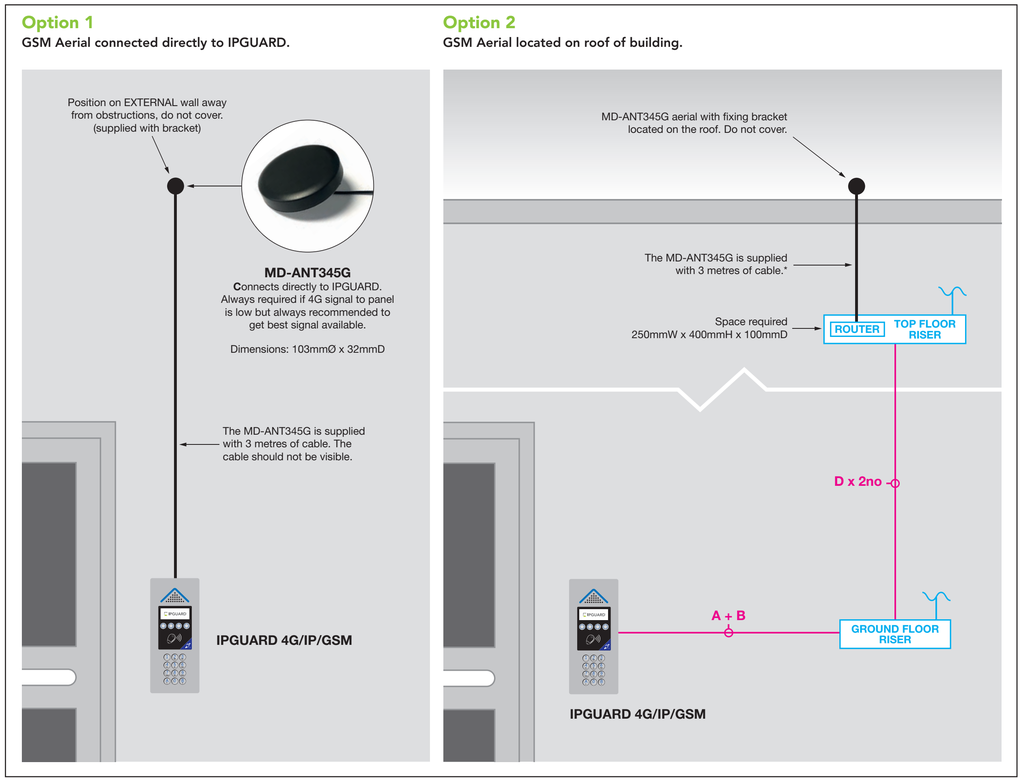


IPGUARD 4G/IP/GSM Smart Visitor Door Entry, BATICONNECT CLOUD.

T6001



IPGUARD MD-ANT345G AERIAL WITH FIXING BRACKET



PROXIMITY READER INSTALLATION.

T12000

VIDEO DOOR ENTRY: VIDEO MONITOR IN LOBBY OF FLAT.

LOW RISE

T8052A

DIGITAL BUT NON-IP SYSTEM

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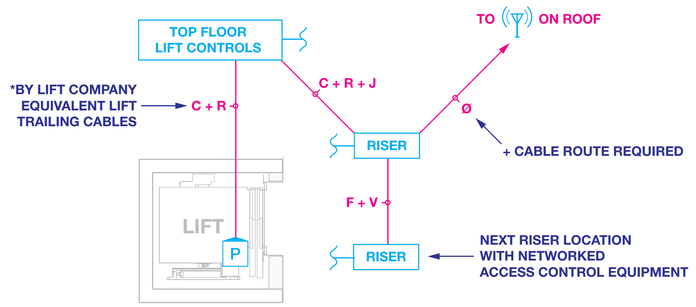
LIFT: FLOOR SPECIFIC PROXIMITY READER IN LIFT CAR

T12020A

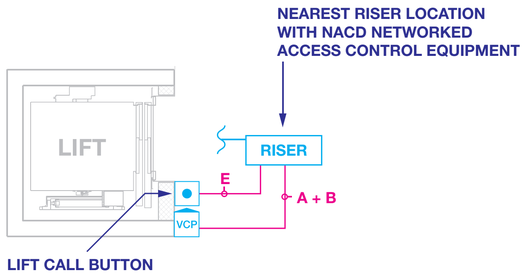


J cable = LSZH Firefighter® ZHH stranded 21-core copper cable, 1mm² per core, with Y/G negative (www.belcom.com)

J cabling examples:
01 – 10 floors = J cable (21no cores) x 1no
11 – 20 floors = J cable (21no cores) x 2no
21 – 30 floors = J cable (21no cores) x 3no

LIFT: VISITOR CALL PANEL WITH PROXIMITY READER CONTROLLING THE ENABLING OF LIFT CALL BUTTON.

T12018A



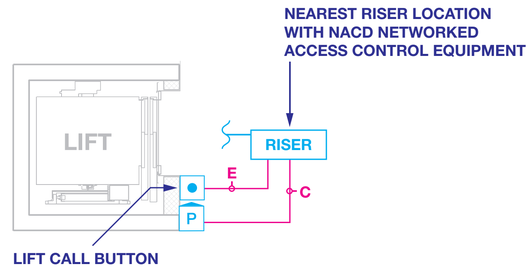
OPERATION

Visitor calls resident. Resident can temporarily enable Lift Call Button from monitor/handset button. Guest can now call the lift.

Resident on foot uses proximity keyfob to temporarily enable Lift Call Button. Resident can now call the lift.

LIFT: PROXIMITY READER CONTROLLING THE ENABLING OF LIFT CALL BUTTON

T12017A

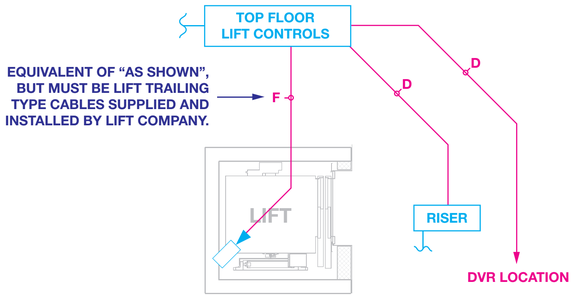


OPERATION

Resident on foot uses proximity keyfob to temporarily enable Lift Call Button. Resident can now call the lift.

LIFT: CCTV CAMERA IN LIFT CAR

T12021

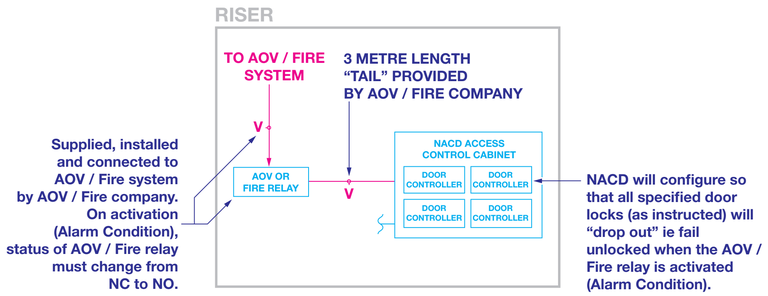


RISER

240VAC/13A unswitched fused spur x 1no

INTERFACING AOV SYSTEM WITH NACD VISITOR DOOR ENTRY & ACCESS CONTROL

T13501



V = FP200 (BS5839-1 / Class 1 CU compliant) 1mm²/core power cable, 3-core + 1-core Earth.
(Red sheaf, brown, grey, black + green/yellow cores)

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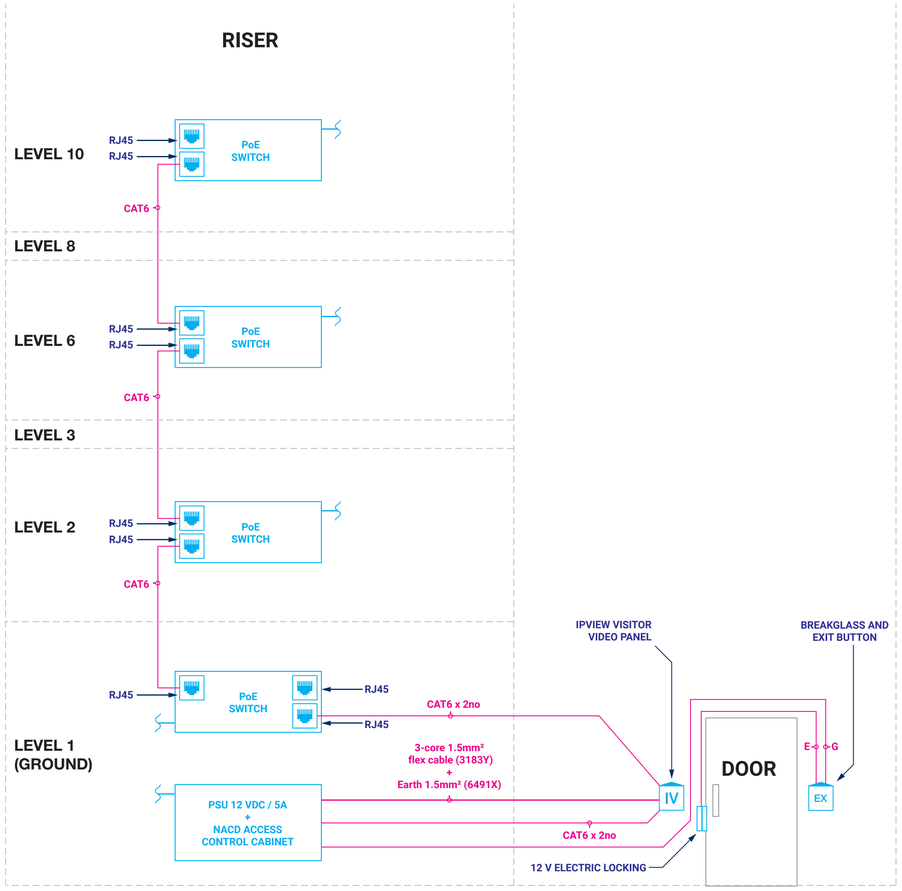
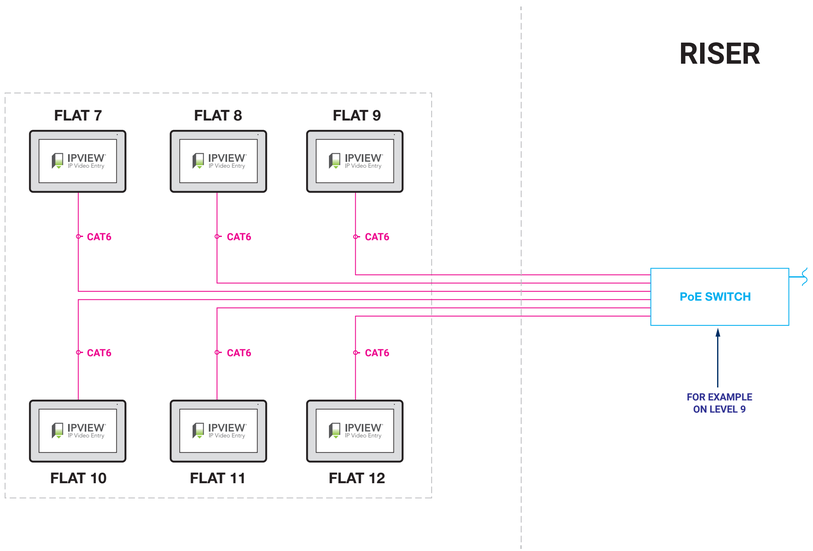
IPVIEW VIDEO ENTRY RISER CABLING SCHEMATIC – GENERAL

T no. IPV92



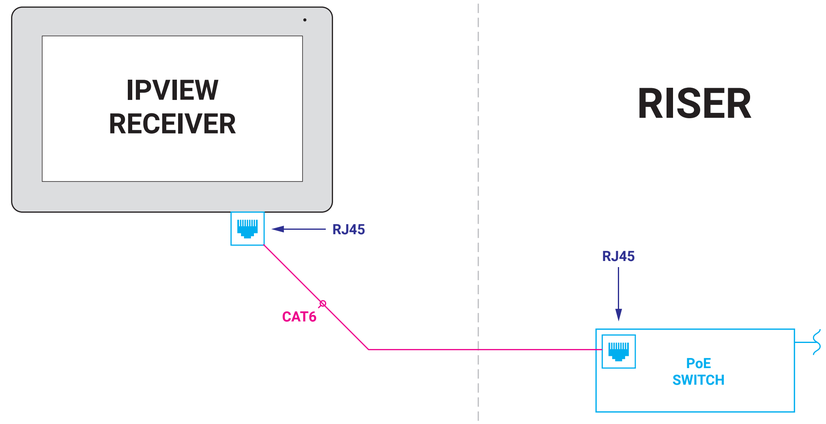
IPVIEW VIDEO RECEIVERS CABLING FROM FLAT TO PoE SWITCH IN RISER

T no. IPV90



IPVIEW VIDEO RECEIVER CABLING SCHEMATIC

T no. IPV94



IPVIEW® FULL IP POE VIDEO DOOR ENTRY PANEL WITH INTEGRAL PROXIMITY READER.

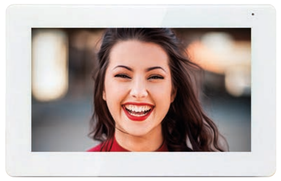
IV

IPVIEW-F
Flush Flanged BS316 S.Steel
Backbox: 360mmH x 135mmW x 70mmD
Facia and flange: 410mmH x 185mmW

IPVIEW-HS
Hooded Surface BS316 S.Steel
374mmH x 149mmW x 63mmDB x 93mmDT

IPVIEW TOUCH
370H x 144W x 50D mm

7" TFT Touchscreen



IPVIEW® Smart Receiver

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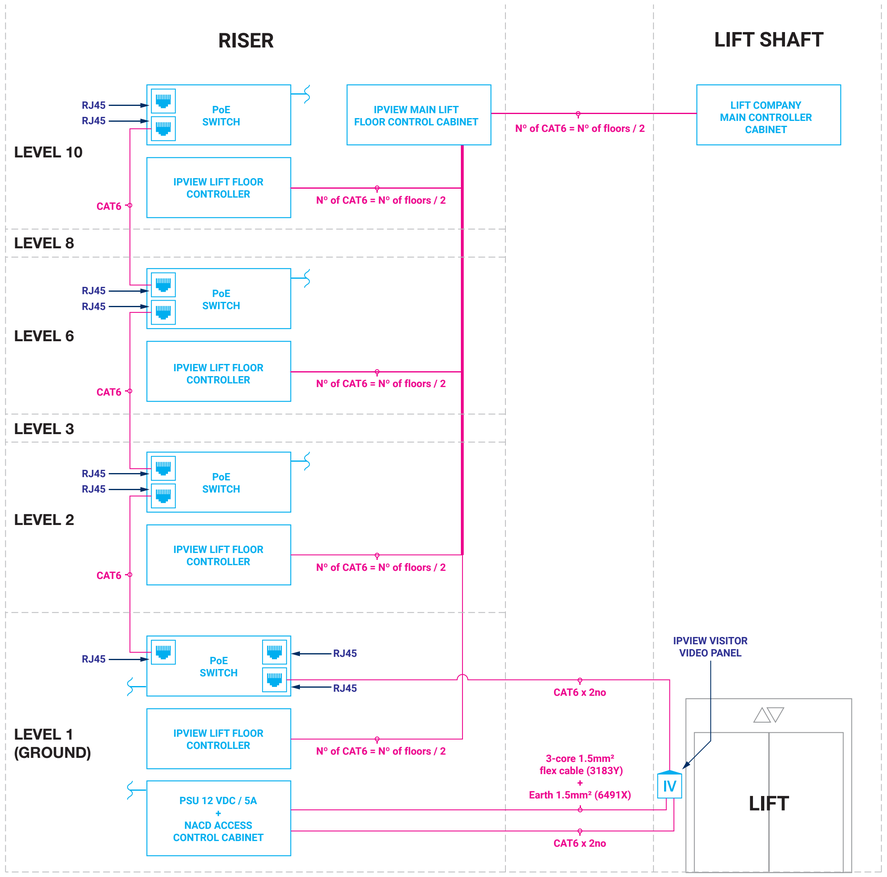
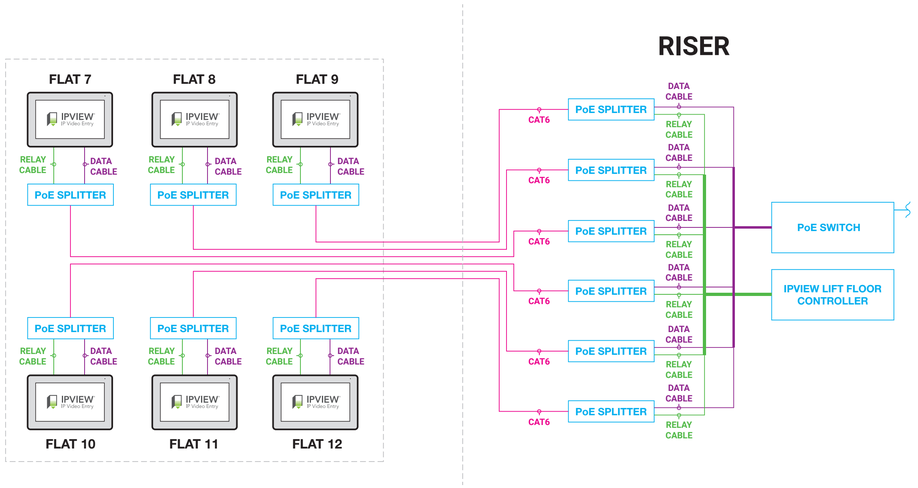
IPVIEW **LIFT** FLOOR SPECIFIC GENERAL SCHEMATIC

T no. IPVL-100MS



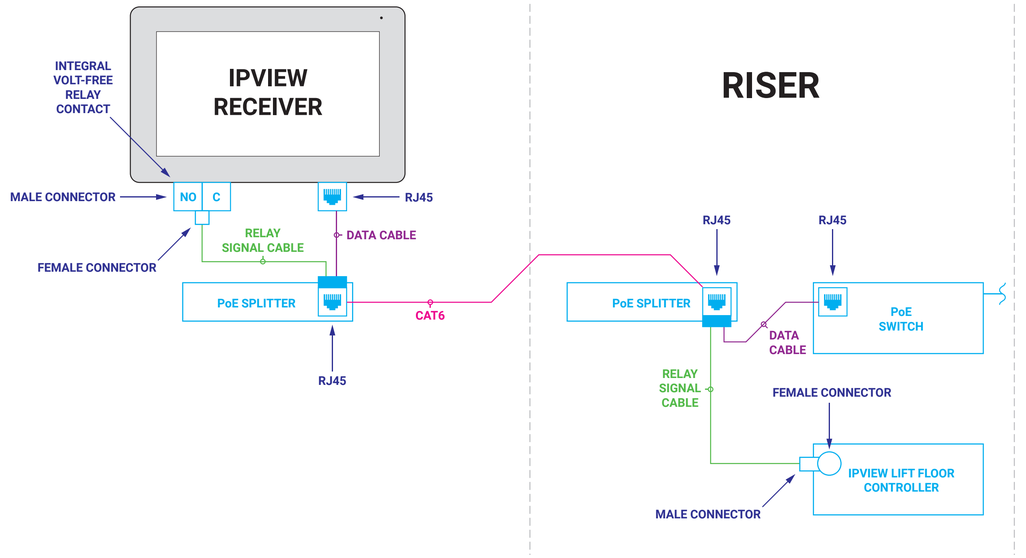
IPVIEW VIDEO RECEIVERS CABLING FROM FLAT TO RISER: **LIFT FLOOR SPECIFIC**

T no. IPVL-102FL

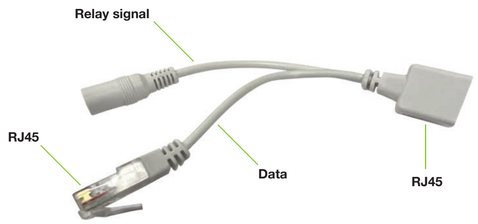


IPVIEW VIDEO RECEIVER **LIFT** FLOOR SPECIFIC CONTROL SCHEMATIC

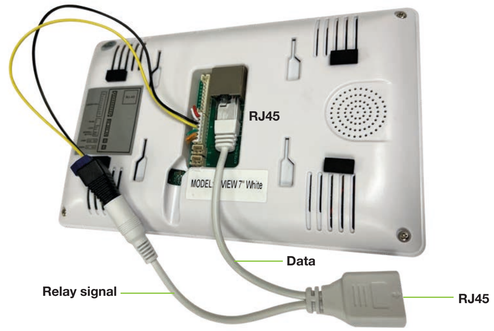
T no. IPVL-104DV

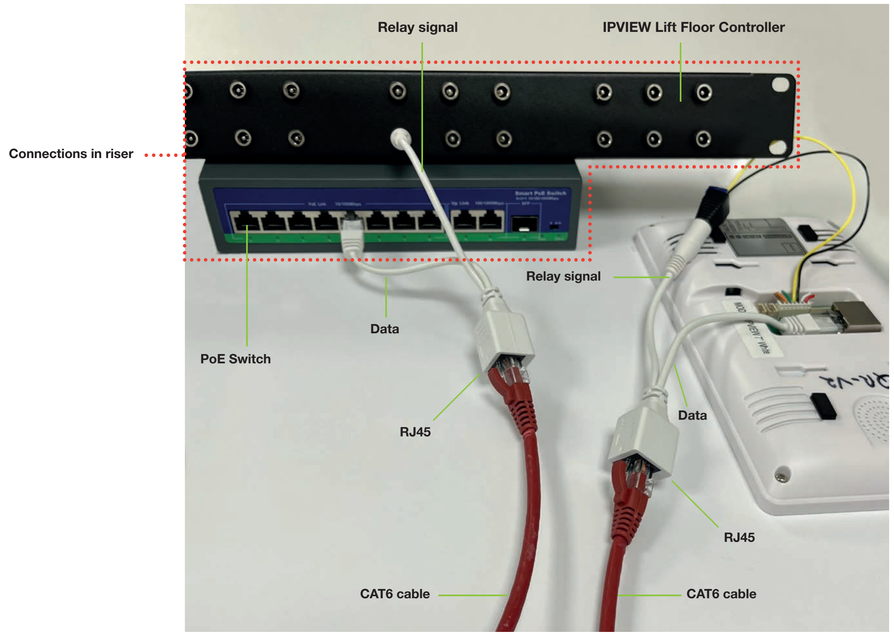


POE SPLITTER



REAR OF IPVIEW MONITOR





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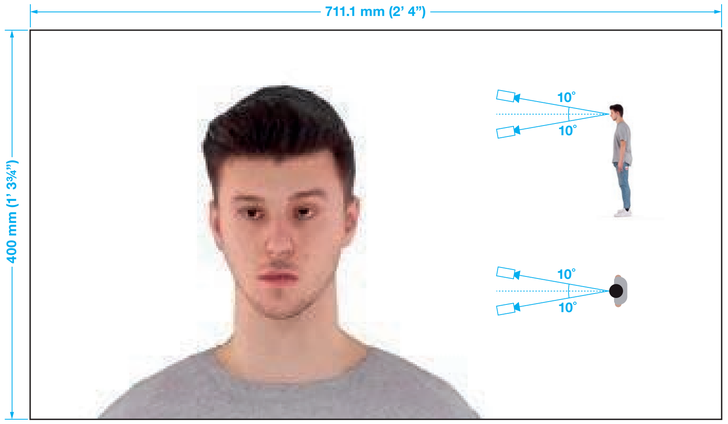
CCTV FIELD OF VIEW IMAGE TYPES, SET-UPS & RECOMMENDED INCIDENT ANGLES.

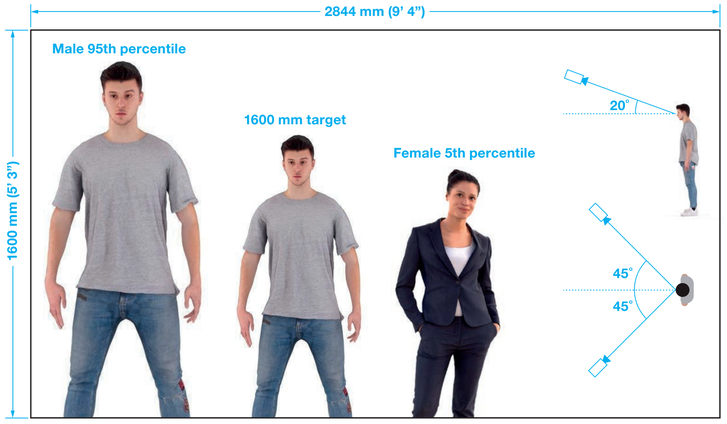
GENERIC LEGEND

INSPECT



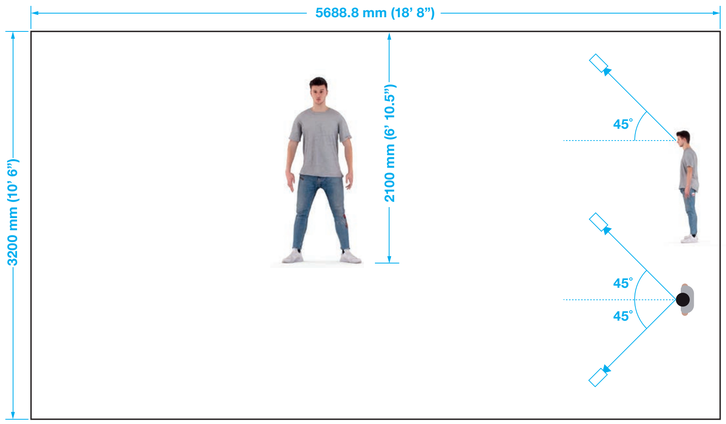
400% Screen Height = **INSPECT** = **1000ppm / 320ppf min**
= 2700 pixels/metre @ 1080p. Incident Angle 10° (V) & 10° (H)

IDENTIFY



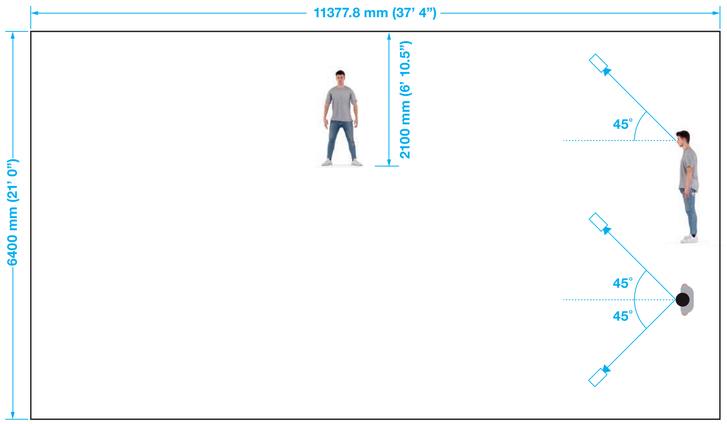
100% Screen Height = **IDENTIFY** = **250ppm / 80ppf min**
= 675 pixels/metre @ 1080p. Incident Angle 20° (V) & 45° (H)

RECOGNITION



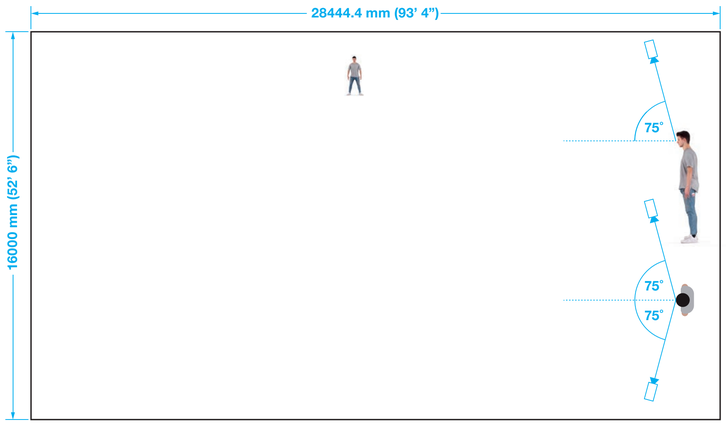
50% Screen Height = **RECOGNITION** = **125ppm / 40ppf min**
= 338 pixels/metre @ 1080p. Incident Angle 45° (V) & 45° (H)

OBSERVE



25% Screen Height = **OBSERVE** = **62.5ppm / 20ppf min**
= 169 pixel/metre @ 1080p. Incident Angle 45 (V) & 45 (H)O O

DETECT



10% Screen Height = **DETECT** = **25 ppm / 8ppf min**
= 68 pixels/metre @ 1080p Incident Angle 75 (V) & 75 (H)O O

ANPR

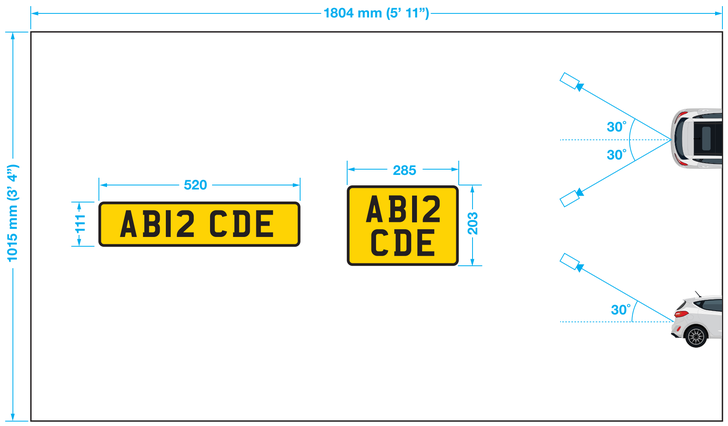


Plate = 20% +/- Screen Height = **400ppm / 128ppf min**
= 940 ppm @ 1080p. Incident Angle 30° (V) & 30° (H)

Field of View Best Practice Guide

Aligned with IEC 62676 – Video Surveillance Systems for Security Applications Part 4 'Application Guidelines'.

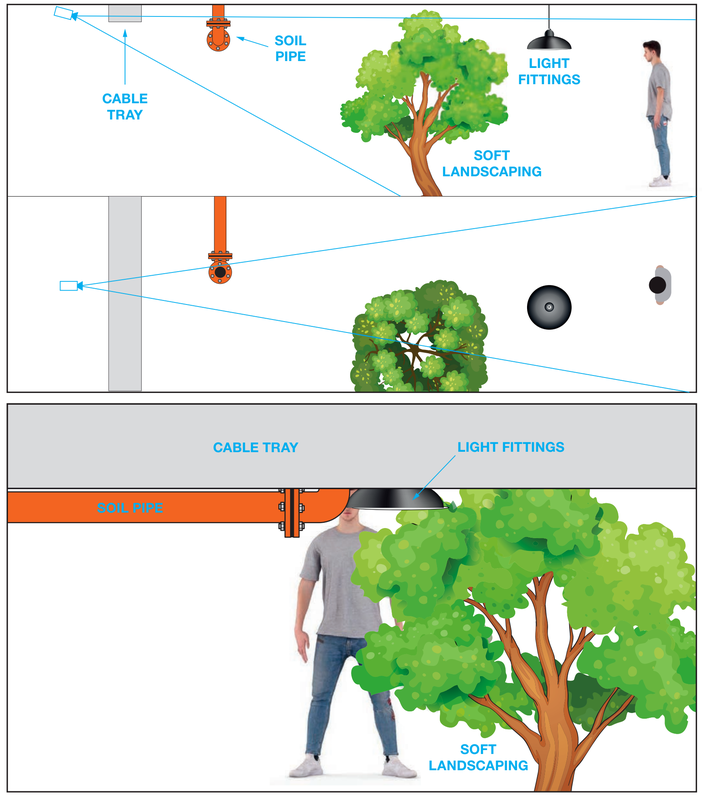
95th Percentile Male = 1,865mm / 73.4 ins
5th Percentile Female = 1,515mm / 59.6 ins

The difference in Height between Male 95th percentile and Female 5th percentile is 350mm (1' 1¾").

All Screen widths shown are 'at target'. Primary FoV types is percentage screen height; secondary FoV based upon pixels per meter and must be within the ppm shown in **Green**.

Best practice – Incident Angle of View should be within the angle shown for each image type. IEC 62676-4 states target should face towards camera at an angle no greater than 22.5 degrees

OBSTRUCTIONS



CCTV camera positioning

1. Unobstructed field of view between lens and intended target.
2. Never above bicycle racks, bins, machinery, plant.

To pass NSI Quality Audit, NACD Commissioning and Client Acceptance Tests:

There must be no objects in the field of view that mask the target and the cameras must be accessible for maintenance.

CCTV cameras on NACD drawings:

A = ANPR (car plates)
D = Detect
O = Observe
R = Recognition
I = Identify
N = Inspect

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