

Newton Series

Newton10(N10) / Newton (N20) / Newton (N40)

Opening force 80% down
 Running noise 20% down
 Compared to conventional Industrial Sliding Door System



Each Spec

N10

Loading weight
 1000N (About 100kg)

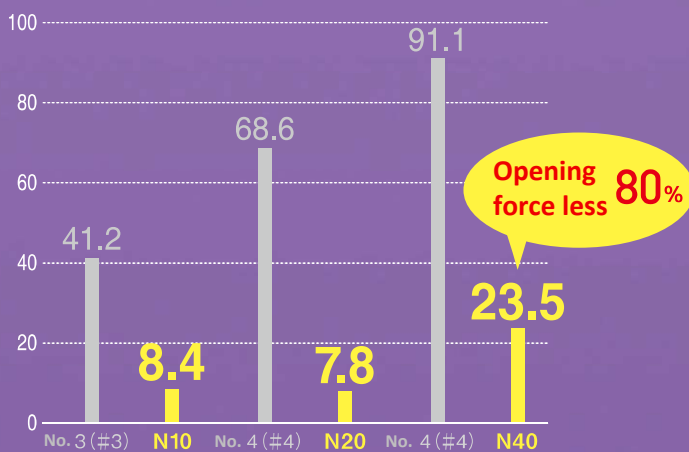
N20

Loading weight
 2000N (About 200kg)

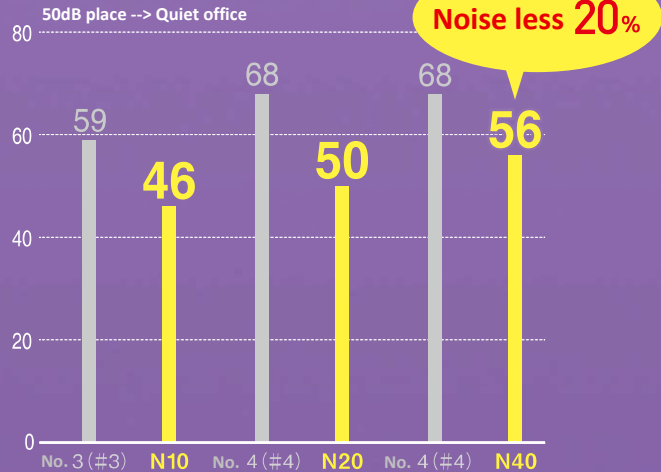
N40

Loading weight
 4000N (About 400kg)

■ Opening force (N)



■ Running noise (dB)



※Measured Door weight (4 wheel×2 suspension)---- 980N(Mass 100kg): Steel No.3(#3), N10/1470N(Mass 150kg): Steel No.4(#4), N20/2940N(Mass: 300kg): Steel No.4(#4), N40

Industrial Sliding Door System "Newton"

Loading Weight
(Per two 4-wheel hangings)*1

100kg ▶ N10

200kg ▶ N20

400kg ▶ N40

m
Meter Screw

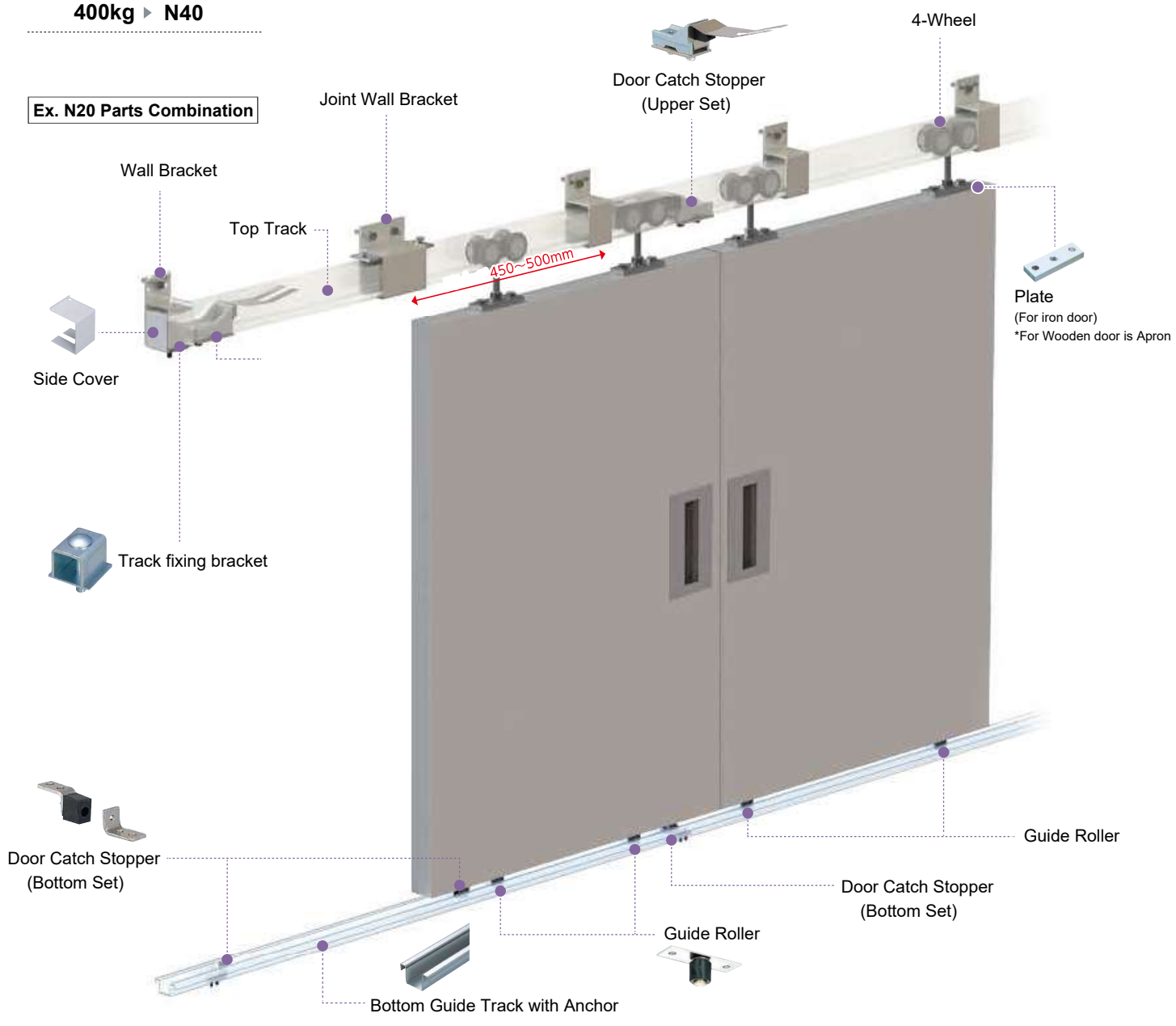
Powder Coating
Munsell
N7
(Gray)

Spot Welding

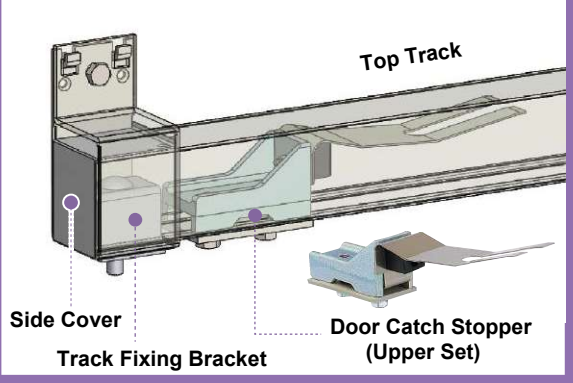

How to install
Sliding Door
Track System



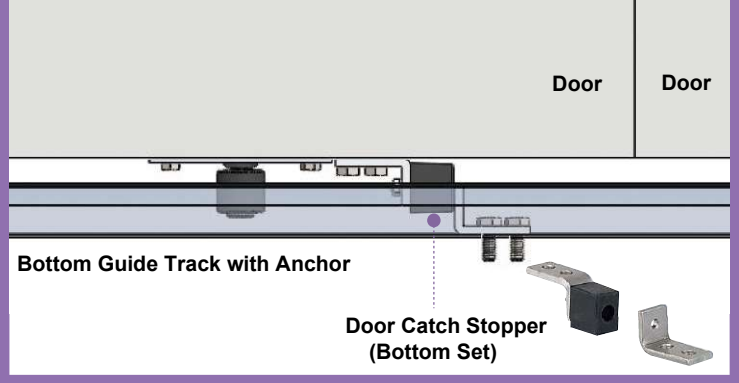
Ex. N20 Parts Combination



Edge Part of Top Track *2



Door Bottom Part (Example of installation)



Industrial Sliding Door System Newton10(N10)

Main feature of Newton(N10/N20/N40)

1 Enhanced quietness wheel

Running noise 20% down by using a resin material on the outer circumference of wheel.
Can open and close quietly in night time.



2 Meter hanging bolt

Meter bolt is adopted considering market trend.

3 Flexible wheel axis

Wheel gets load equally even if the door inclines due to the wheel design that moves flexibly in all directions.



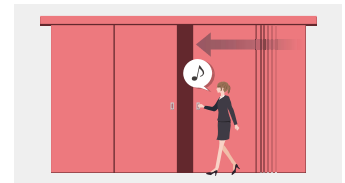
4 Free of Hexavalent chromium

Use the material without Hexavalent chromium, which is environmentally friendly.



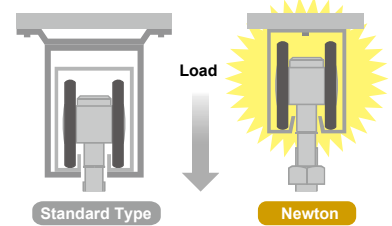
5 Smooth Runnability

Adapt a ball bearing on the axle bearing and resin material on the outer circumference on wheel.
Also realize smooth runnability by contact less between wheel and slanted track.
The reduction of opening and closing door force 80% helps womens open and close comfortably.



6 Adopt High-strength material

Can direct mount a wheel on inside track by adopting High-strength material.

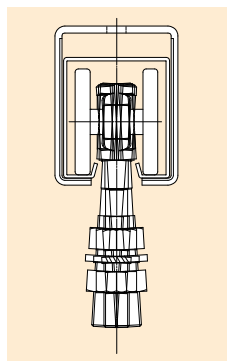


Newton 10 (Load Weight: 1000N(About 100kg))

- Increased Quietness and Easy open & close
- Free of Hexavalent chromium processing (Friendly to environment)

Loading capacity: 1000N(about 100kg) at two of 4-wheels per one door.
600N(about 60kg) at two of 2-wheels per one door.
300N(about 30kg) at one trolley 2-wheel.

- Newton10 is Medium weight type between Steel Sliding door track system #2 and #3. Adopt an international standard unit(SI) each for names.
- Realize High-durability and light weight by adopting a Hi-strength welded galvanized steel(Powder coating) on the Track.
- Adopt a resin material on the outer circumference of wheel.
New shape of track to prevent contact between wheel inside and track realizes quietness and smooth runnability.
- Wheel gets load equally even if the door or hanging tools incline due to the wheel design that moves flexibly in all directions.
Curve track(R600) is also available.(Applied to 4-wheel and 2-wheel)
- Brackets are proceeded to avoid any scratch during installation work.
- Two variations of 4-wheel and 2-wheel to hang door and tools.



*Image of Flexible Wheel Axis

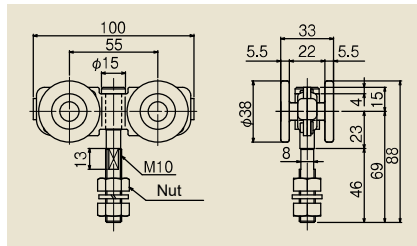
⚠ Newton is not replaceable with Standard Steel Sliding door track parts due to it's millimeter size applied to it's track, Bottom Guide Track with Anchor and Hanging bolt spec.

■ Comparison date: Door weight 980N(100kg) *House-test date
※ Hanging two of 4-Wheels per one door

| Steel Wheels | Opening force(N) | Running noise(dB) |
|------------------|-------------------|-------------------|
| | Initial value | initial value |
| Newton10(N10) | 8.4N (0.9kgf) | 46dB |
| Standard Type #3 | 41.2N (4.2kgf) | 59dB |

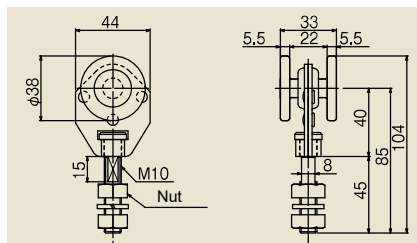
Industrial Sliding Door System **Newton10(N10)**

N10 Model



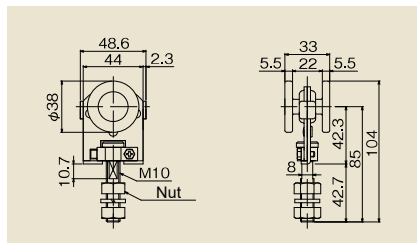
N10 4-wheel
N10-4WS

- Materials: SPHC(Trivalent Chrome), Resin, etc.
- Load capacity: up to 100N(about 100kg) by hanging 2 pcs per one door.
- Adapt a ball bearing on the axle bearing.
- Available for Curve Track(R600).
- Don't use for other than N10 Track(N10 Curve Track).



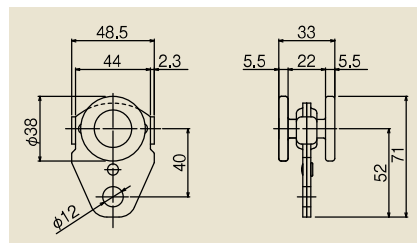
N10 2-Wheel
N10-2WS

- Materials: SPHC(Trivalent Chrome), Resin, etc.
- Load capacity: up to 600N (about 60kg) by hanging 2 pcs per one door.
- Adapt a ball bearing on the axle bearing.
- Available for Curve Track(R600).
- Don't use for other than N10 Track(N10 Curve Track).



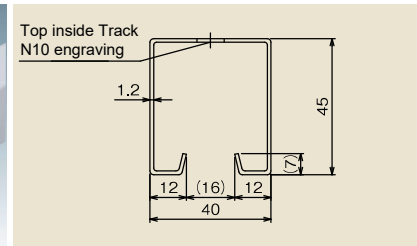
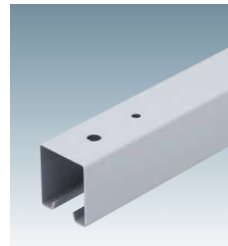
N10 2-Wheel
N10-2WS2

- Materials: SPHC(Trivalent Chrome), Resin, etc.
- Load capacity: up to 600N (about 60kg) by hanging 2 pcs per one door.
- Adapt a ball bearing on the axle bearing.
- Hanging bolt is replaceable.
- Available for Curve Track(R600).
- Don't use for other than N10 Track(N10 Curve Track).



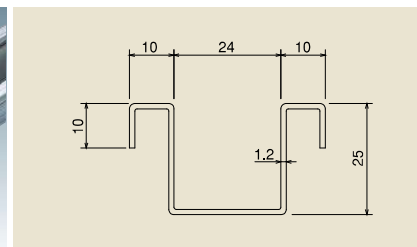
N10 2-Wheel hanging Tools
N10-2TR

- Materials: SPHC(Trivalent Chrome), Resin, etc.
- Load capacity: up to 300N (about 30kg) per one wheel.
- Adapt a ball bearing on the axle bearing.
- Available for Curve Track(R600).
- Don't use for other than N10 Track(N10 Curve Track).



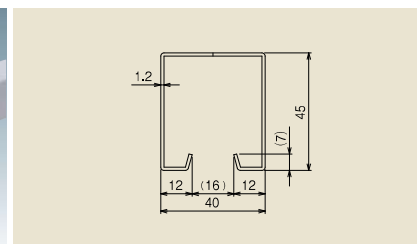
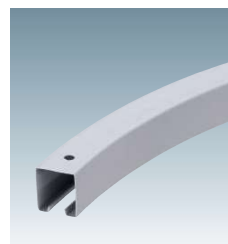
N10 Top Track
N10-HR

- Materials: SPHC(Trivalent Chrome), Resin, etc.
- Track Length: 2000, 3000mm



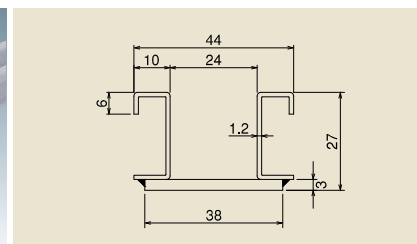
N20 Bottom Guide Track with Anchor
N20-NGR

- Materials: SGCC
- Track Length: 2000, 3000mm
- With Anchor on both sides



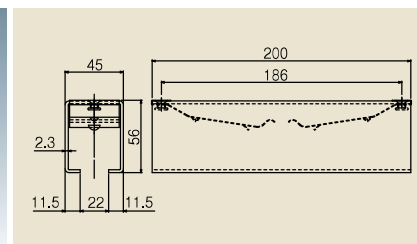
N10 Curve Top Track
N10-HR600R

- Materials: SGCC(Power coating, Munsell M7)
- Standard R: R600(1/4 circle)
- Cross-sectional shape is same with N10 Top Track
- Available for made to order more than R600
- Can't direct mounting without bracket.



N20 Curve Guide Track with Anchor
N20-NGR600R

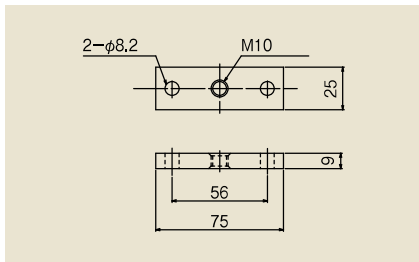
- Materials: SPHC(Lacquer-finished, Munsell M7)
- Standard R: R600(1/4 circle)
- Cross-sectional shape is different from N20 Bottom Guide Track with Anchor.
- Available for made to order more than R600



N10 One-touch Joint
N10-OJ

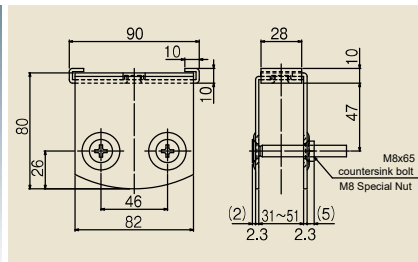
- Materials: SPHC(Power coating, Munsell M7), etc
- Connection parts for Tracks. Use between brackets to joint the tracks

Industrial Sliding Door System Newton10(N10)



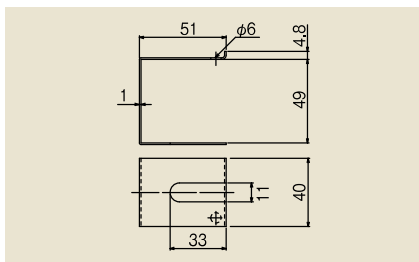
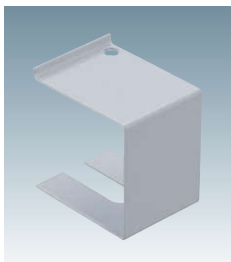
N10 Plate
N10-PL

- Materials: SS400(Trivalent Chrome)
- Parts for connecting 4-wheel bolt and iron door.
- Recommendable screw: M10



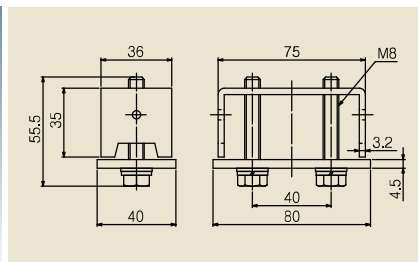
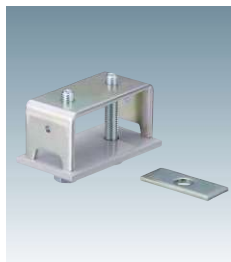
N10 Apron
N10-AP

- Materials: SPHC(Power coating, Munsell M7), etc
- Parts for connecting 2 or 4-wheel bolt and wooden door.



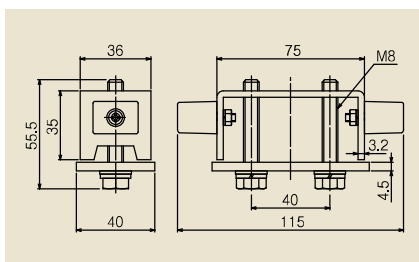
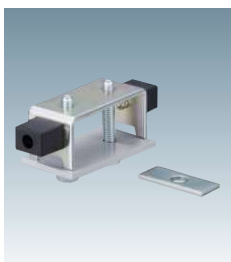
N10 Side Cover
N10-SK

- Materials: SPCC(Power coating, Munsell M7)
- Cover for blindfolding the edge of track.
- In case of stopping wheels, please use door stopper.



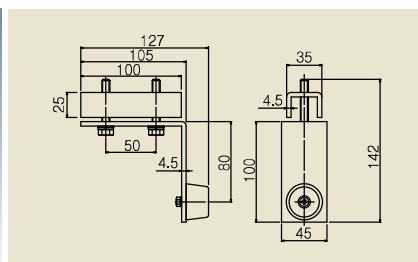
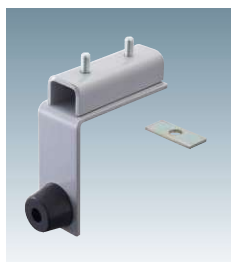
N10 Door Stopper
N10-CS

- Materials: SPHC(Trivalent Chrome), etc
- Use for stopping wheel drop out and door positioning.
- *Not available for Curve Track.



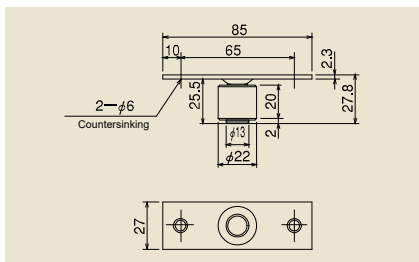
N10 Door Stopper with Rubber
N10-CSQ

- Materials: SPHC(Power coating, Munsell M7), Black rubber, etc
- Use for stopping wheel drop out and door positioning.
- In case of big impact to be expected, please hit the door on the vertical frame.
- *Not available for Curve Track.



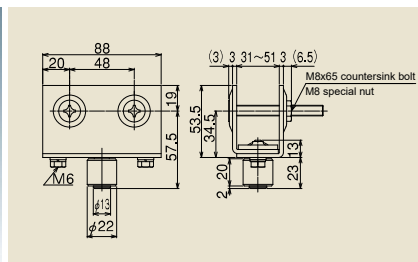
N10 Door Stopper for Track mounting
N10-RCS

- Materials: SPHC(Power coating, Munsell M7), Black rubber, etc
- Use with Bottom Door Stopper(Separately).
- *Not available for Curve Track.



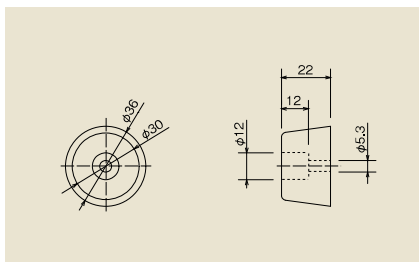
N20 Guide Roller
N20-GRO

- Materials: SPHC(Power coating, Munsell M7), Resin, etc
- Recommendable screw: M5



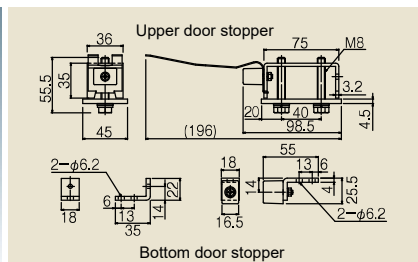
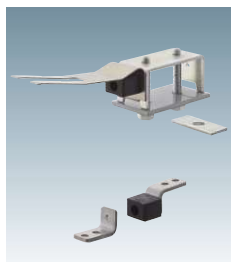
N20 Guide Roller with Frame
N20-GRAP

- Materials: SPHC(Power coating, Munsell M7), Resin, etc



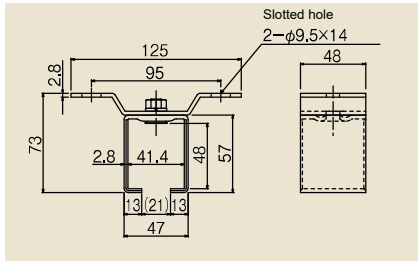
N20 Rubber Door Stopper
N20-CSG

- Material: Rubber(Black)
- Door Stopper attached to vertical frame.
- Recommendable screw: M5



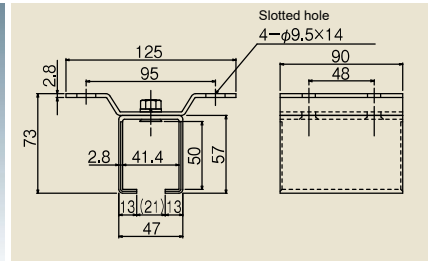
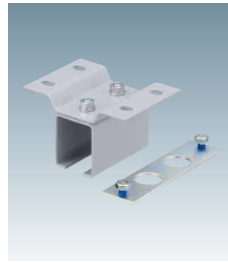
N10 Door Catch Stopper
N10-KCS

- Materials: SPHC(Trivalent Chrome), Rubber(Black), etc
- 1 set by Upper and bottom door stoppers
- Please use this door stopper in case of bi-parting fitting.
- Recommendable screw: M6
- *Not available for Curve Track



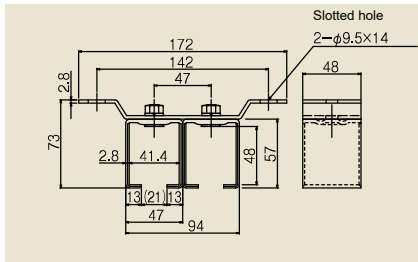
N10
Ceiling Bracket
(Single Channel)
N10-OB

- Materials: SPHC(Power coating, Munsell M7), etc
- Assembly bolts: M8
- Recommendable screw: M8



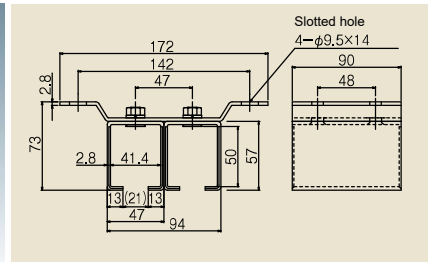
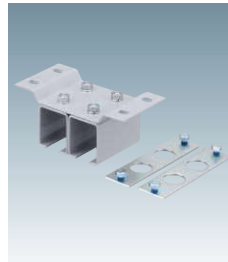
N10
Joint Bracket for Ceiling
(Single Channel)
N10-OBT

- Materials: SPHC(Power coating, Munsell M7), etc
- Use in Joint point between tracks.
- With Track connection plate
- Assembly bolts: M8
- Recommendable screw: M8



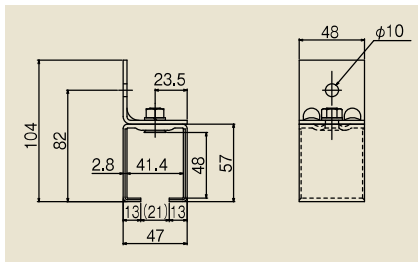
N10
Ceiling Bracket
(Double Channel)
N10-OB2

- Materials: SPHC(Power coating, Munsell M7), etc
- Assembly bolts: M8
- Recommendable screw: M8



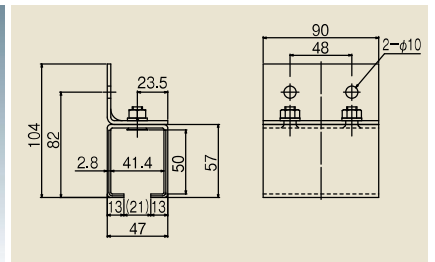
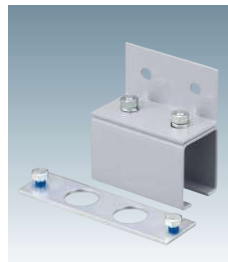
N10
Joint Bracket for Ceiling
(Double Channel)
N10-OB2

- Materials: SPHC(Power coating, Munsell M7), etc
- Use in Joint point between tracks.
- With Track connection plate
- Assembly bolts: M8
- Recommendable screw: M8



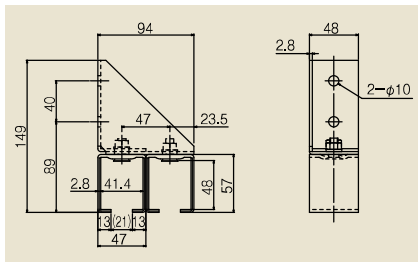
N10
Wall Bracket
(Single Channel)
N10-SB

- Materials: SPHC(Power coating, Munsell M7), etc
- Assembly bolts: M8
- Recommendable screw: M8



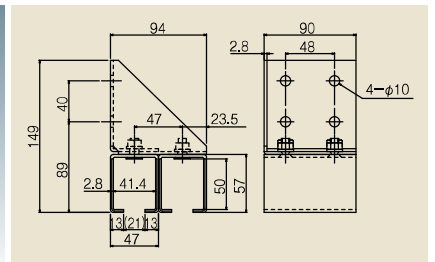
N10
Joint Bracket for Wall
(Single Channel)
N10-SBT

- Materials: SPHC(Power coating, Munsell M7), etc
- Use in Joint point between tracks.
- With Track connection plate
- Assembly bolts: M8
- Recommendable screw: M8



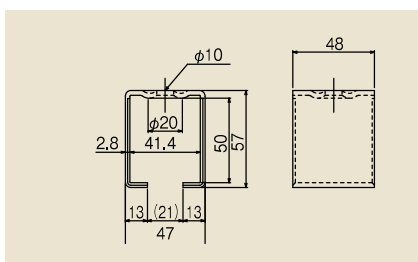
N10
Wall Bracket
(Double Channel)
N10-SBT2

- Materials: SPHC(Power coating, Munsell M7), etc
- Assembly bolts: M8
- Recommendable screw: M8



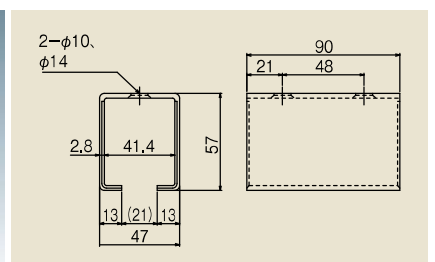
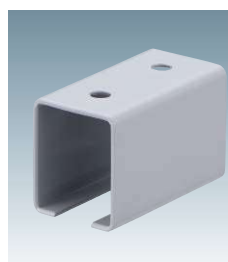
N10
Joint Bracket for Wall
(Double Channel)
N10-SBT2

- Materials: SPHC(Power coating, Munsell M7), etc
- Use in Joint point between tracks.
- With Track connection plate
- Assembly bolts: M8
- Recommendable screw: M8



N10
Ceiling Bracket
N10-BOX

- Materials: SPHC(Power coating, Munsell M7), etc
- Recommendable screw: M8 Countersink bolt



N10
Joint Ceiling Bracket
N10-TBOX

- Materials: SPHC(Power coating, Munsell M7), etc
- Use in Joint point between tracks.
- Recommendable screw: M8 Countersink bolt