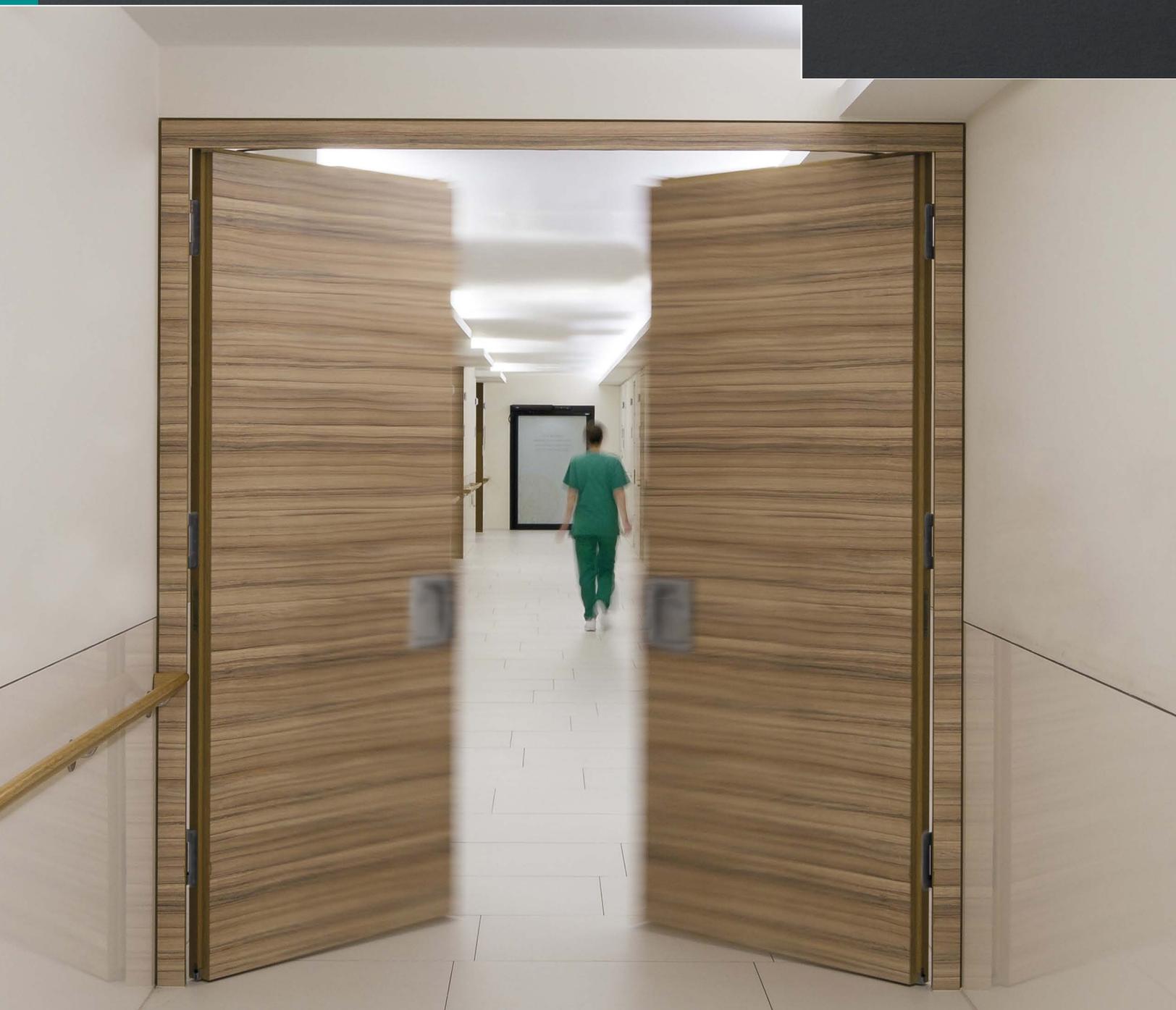


VARIANT®

The adjustable hinge system for commercial doors

VARIANT®



INDEX

VARIANT® VX – The flexible adjustable hinge system

	Hinge systems from 100 - 300 kg (220 lbs. - 661 lbs.)	Load Capacities
9	VX 7729/4-1/2" X 4" K Kit	up to 120 kg (264 lbs.)
10	VX 7729/4-1/2" X 4-1/2" K Kit	up to 120 kg (264 lbs.)
11	VX 7729/160 X 4" K Kit	up to 200 kg (440 lbs.)
12	VX 7729/160 X 4-1/2" K Kit	up to 200 kg (440 lbs.)
13	VX 7729/160-4 X 4" K Kit	up to 300 kg (661 lbs.)
14	VX 7729/160-4 X 4-1/2" K Kit	up to 300 kg (661 lbs.)
15	Receivers	

	Hinge systems for swing-clear requirements	Load Capacities
17	VX 7749/160-4 K Care Kit	up to 100 kg (220 lbs.)

VARIANT® VN – The compact adjustable hinge system

	Hinge systems for retrofit requirements	Load Capacities
19	VN 2927/4-1/2" X 4" K Compact Kit	up to 120 kg (264 lbs.)
20	VN 2927/4-1/2" X 4-1/2" K Compact Kit	up to 120 kg (264 lbs.)

Accessories / Technical information

21	Reinforcement
22	Winbag

23	Installation and Adjustment
----	------------------------------------

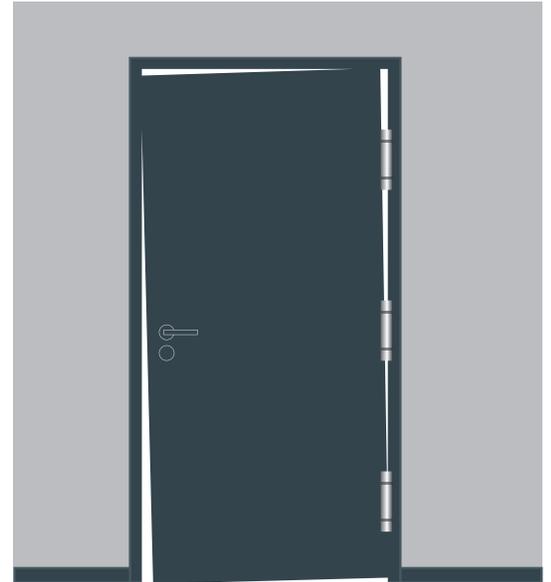
29	General Information
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VARIANT[®] – THE ADJUSTABLE HINGE SYSTEM

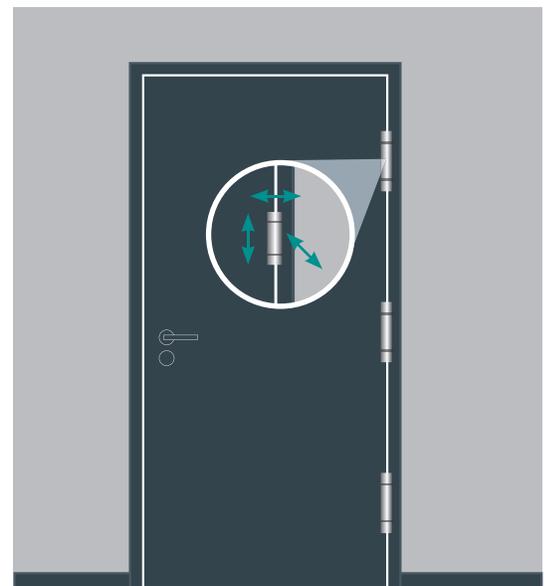
SIMONSWERK, as a leading German manufacturer of heavy duty, high performance hinge systems, has been producing premium hinges for over 125 years. With a corporate representation in 19 countries, SIMONSWERK North America is bringing an entire series of proven innovative European hinge products adapted to the North American marketplace.

The functionality of a door opening is a crucial life/safety requirement for commercial buildings, especially fire doors. If a door cannot be opened or closed, an entire section or area of a building may be closed off. For this reason, annual fire inspections were introduced by the National Fire Protection Association (NFPA). NFPA 80, as the de facto standard for the installation and maintenance of fire-rated door assemblies, defines the requirements.

Common door problems, e.g. door sagging, foundation wall settling, warpage, require door assembly adjustments to maintain the functionality and meet life/safety requirements. Standard hinges, such as butt hinges or continuous hinges, generally do not offer a 3-dimensional adjustment feature. Without an adjustment feature on the hinge, the repair options are limited to resetting and/or shimming a hinge, modifying an existing hinge, re-machining a door and/or un- and reinstalling the frame. It is often required to refinish an existing wall when a frame is reinstalled. Any modifications to a hinge can compromise the integrity of the entire hinge assembly. These repair options are all time consuming and disruptive – not to mention, expensive.



Standard Commercial Hinges



SIMONSWERK 3-Way Adjustable Hinge Systems

VARIANT® – HINGE ADJUSTABILITY

Three-way adjustable hinge systems have been used successfully in Europe for many years in high frequency institutional, commercial and industrial applications such as office buildings, schools, hospitals and airports. This proven concept of door adjustability has been tailored specifically to fit the needs of the North American marketplace. Typically, continuous hinges are used in applications requiring robust hinges in North America. However, the VARIANT VX hinge series offers a similar durability with an additional three-way adjustability feature.

The VARIANT series has been developed for wide, heavy duty doors that require a robust and stable hinge. High load values up to 300 kg (661 lbs.) distinguish this hinge system, as well as the maintenance-free slide bearing technology. The hinge features corrosion resistant 304 stainless steel and is suitable for use with functional doors in the field of fire and smoke protection (UL listed up to 3 hours for fire doors).

The VARIANT series hinge systems offer a simple three-way adjustability feature allowing the installer to meet precise installation and maintenance requirements with the turn of an Allen wrench. The door can be adjusted horizontally, vertically and in/out, giving the user the ability to compensate for any needed door adjustments. These adjustments can be performed at any time by maintenance staff.

VARIANT® – THE ADJUSTABLE HINGE SYSTEM FOR COMMERCIAL DOORS

- › alternative hinge for doors with high frequency use
 - › 3-way adjustable for maintaining functionality
 - › UL listed up to 3 hours for fire doors
-



VARIANT® – HINGE APPLICATIONS

The VARIANT series can be used for doors and frames made out of steel, stainless steel, aluminum and/or wood. SIMONSWERK offers two series for different applications. For new hollow metal frame installations, the VARIANT VX series is recommended to be used in combination with wood or hollow metal doors. For renovation with new wood doors and already installed frames (hollow metal or wood), the VARIANT Compact series is recommended. The following table is a recommendation for frame and door combination.

FRAME-DOOR COMBINATION

MODEL VERSION	Metal frame + wood door	Metal frame + metal door	Wood frame + wood door
VARIANT VX	■	■	□ *
VARIANT Compact	■		■

* Minimum frame thickness of 2" is required

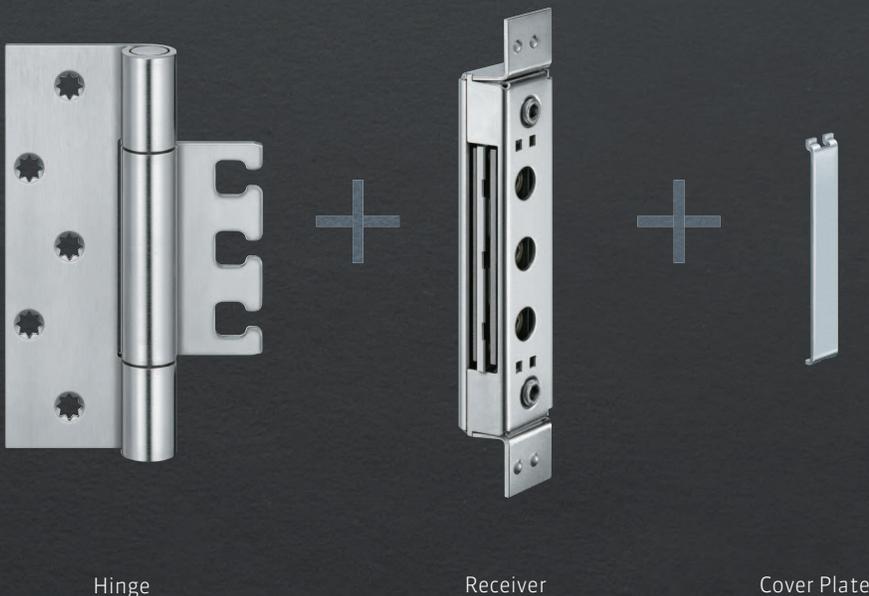


VARIANT® – DESIGN MEETS FUNCTION

THREE-WAY ADJUSTABLE HINGES FOR COMMERCIAL DOORS

SIMONSWERK offers a complete series of three-way adjustable hinges for high frequency institutional, commercial and industrial applications such as office buildings, schools, hospitals and airports. This proven concept of door adjustability has been tailored specifically to fit the needs of the North American marketplace.

The VARIANT series can be used for doors and frames made out of steel, stainless steel, aluminum and/or wood. SIMONSWERK offers two series for different applications. For new hollow metal frame installations, the VARIANT VX series is recommended to be used in combination with wood or hollow metal doors. For renovation with new wood doors and already installed frames (hollow metal or wood), the VARIANT Compact series is recommended.





VARIANT VX

- › up to 120 kg (264 lbs.)
- › 4-1/2" model version with 4" or 4-1/2" backset



VARIANT VX

- › up to 200 kg (440 lbs.)
- › 160 mm model version with 4" or 4-1/2" backset



VARIANT VX

- › up to 300 kg (661 lbs.)
- › 160 mm model version with 4" or 4-1/2" backset



VARIANT Care

- › for swing-clear requirements
- › up to 100 kg (220 lbs.)



VARIANT Compact

- › ideal for retrofit requirements
- › up to 120 kg (264 lbs.)
- › 4-1/2" model version with 4" or 4-1/2" backset

VARIANT®

THE ADJUSTABLE HINGE SYSTEM FOR COMMERCIAL DOORS

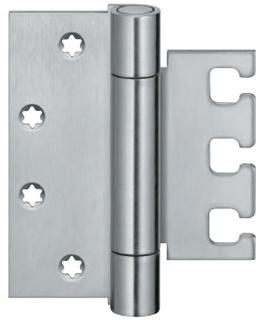
VARIANT is a proven hinge system that has been used in Europe for high-traffic and heavy weight doors in commercial applications for many years. Typically, continuous hinges are used in applications requiring robust hinges in North America. The VARIANT hinge system, however, provides a similar durability and an additional three-way adjustability feature. Adapted to the North American market, this elegant hinge system offers a more efficient way to maintain the functionality of door openings.



Hinge system consisting of a hinge and a receiver

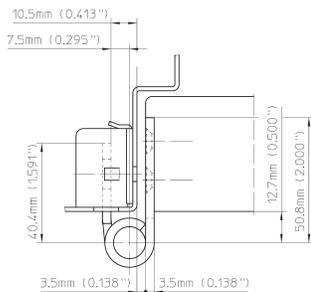
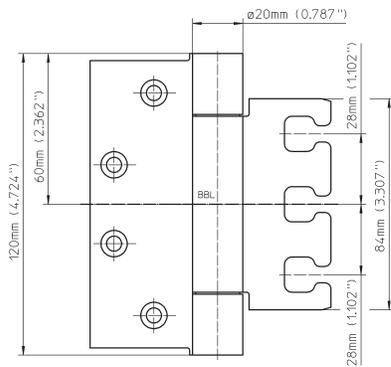
Load capacities up to 300 kg (661 lbs.)

Easily adjustable in 3 dimensions with the simple turn of an Allen wrench



Receiver VX 7511 3D

Cover Plate



VX 7729/4-1/2" x 4" K Kit

For high performance commercial doors

Hinge	up to 120 kg (264 lbs.)
-------	-------------------------

Product Features

- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	120 kg (264 lbs.)
Knuckle diameter	20 mm (0.787")
Material thickness	3.5 mm (0.138")
Screws	# 12
Hinge length	114 mm (4-1/2")
Hinge width	101.6 mm (4")

Finish

satin stainless steel (304 series), polished stainless steel upon request

Installation Tools

Jig	Universal milling frame
Door	routing template No. 5 251085 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 25.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15. Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

Kit consists of

Kit 1	Hinge	VX 7729/4-1/2" x 4" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	4 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/4-1/2" x 4" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	4 machine screws 12 x 1/2"

VARIANT®

VX 7729/4-1/2" x 4-1/2" K Kit

For high performance commercial doors

Hinge up to 120 kg (264 lbs.)

Product Features

- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	120 kg (264 lbs.)
Knuckle diameter	20 mm (0.787")
Material thickness	3.5 mm (0.138")
Screws	# 12
Hinge length	114 mm (4-1/2")
Hinge width	114 mm (4-1/2")

Finish

satin stainless steel (304 series), polished stainless steel upon request

Installation Tools

Jig	Universal milling frame
Door	routing template No. 5 251085 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 25.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15. Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

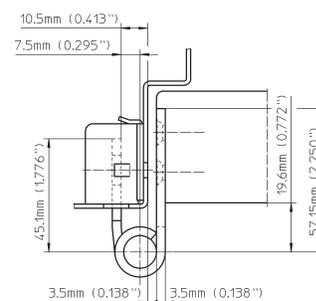
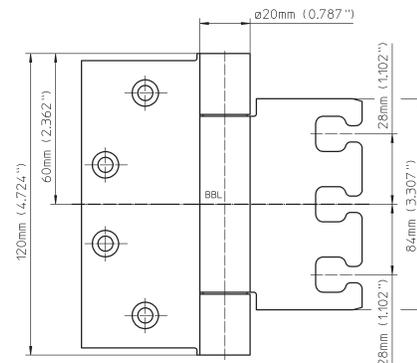
Kit consists of

Kit 1	Hinge	VX 7729/4-1/2" x 4-1/2" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	4 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/4-1/2" x 4-1/2" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	4 machine screws 12 x 1/2"



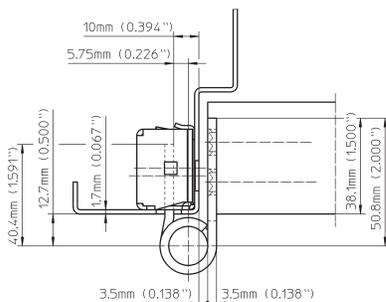
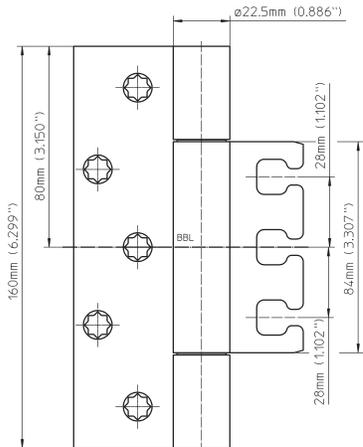
Receiver VX 7511 3D

Cover Plate





Receiver VX 7511 3D Cover Plate



VX 7729/160 x 4" K Kit

For high performance commercial doors

Hinge	up to 200 kg (440 lbs.)
-------	-------------------------

Product Features

- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	200 kg (440 lbs.)
Knuckle diameter	22.5 mm (0.886")
Material thickness	3.5 mm (0.138")
Screws	# 12
Hinge length	160 mm (6.299")
Hinge width	101.6 mm (4")

Finish

satin stainless steel (304 series), polished stainless steel upon request

Installation Tools

Jig	Universal milling frame
Door routing template	No. 5 251103 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 25.

A reinforcement for the steel door is available upon request - see page 21.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15.

Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

Kit consists of

Kit 1	Hinge	VX 7729/160 x 4" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/160 x 4" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 machine screws 12 x 1/2"

VARIANT®

VX 7729/160 x 4-1/2" K Kit

For high performance commercial doors

Hinge up to 200 kg (440 lbs.)

Product Features

- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	200 kg (440 lbs.)
Knuckle diameter	22.5 mm (0.886")
Material thickness	3.5 mm (0.138")
Screws	# 12
Hinge length	160 mm (6.299")
Hinge width	114 mm (4-1/2")

Finish

satin stainless steel (304 series), polished stainless steel upon request

Installation Tools

Jig	Universal milling frame
Door	routing template No. 5 251103 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 25.

A reinforcement for the steel door is available upon request - see page 21.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15.

Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

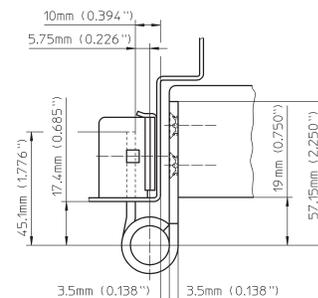
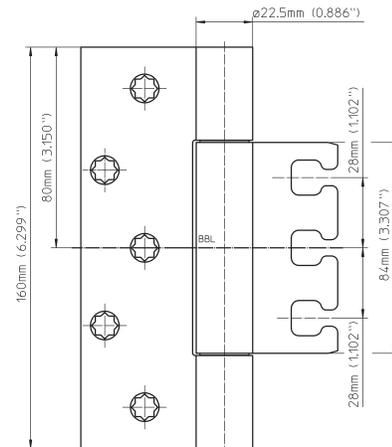
Kit consists of

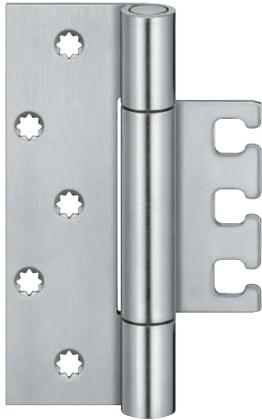
Kit 1	Hinge	VX 7729/160 x 4-1/2" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/160 x 4-1/2" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 machine screws 12 x 1/2"



Receiver VX 7511 3D

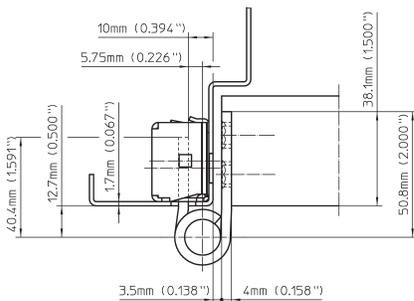
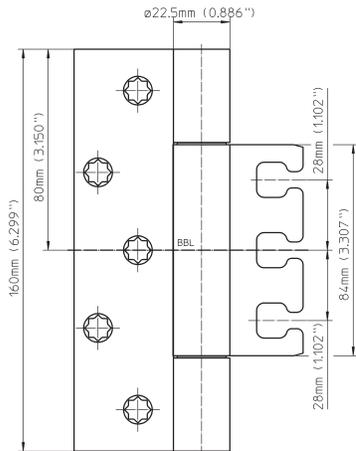
Cover Plate





Receiver VX 7511 3D

Cover Plate



VX 7729/160-4 x 4" K Kit

For high performance commercial doors

Hinge	up to 300 kg (661 lbs.)
-------	-------------------------

Product Features

- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	300 kg (661 lbs.)
Knuckle diameter	22.5 mm (0.886")
Material thickness	4 mm (0.157")
Screws	# 12
Hinge length	160 mm (6.299")
Hinge width	101.6 mm (4")

Finish

satin stainless steel (304 series), polished stainless steel upon request

Installation Tools

Jig	Universal milling frame
Door	routing template No. 5 251103 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

Also the load capacities of the respective combined receiver and the material thickness of the steel frame have to be taken into consideration.

For adjustment instructions see page 25.

A reinforcement for the steel door is available upon request - see page 12.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15.

Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

Kit consists of

Kit 1	Hinge	VX 7729/160-4 x 4" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/160-4 x 4" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 machine screws 12 x 1/2"

VARIANT®

VX 7729/160-4 x 4-1/2" K Kit

For high performance commercial doors

Hinge	up to 300 kg (661 lbs.)
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Product Features

- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	300 kg (661 lbs.)
Knuckle diameter	22.5 mm (0.886")
Material thickness	4 mm (0.157")
Screws	# 12
Hinge length	160 mm (6.299")
Hinge width	114 mm (4-1/2")

Finish

satin stainless steel (304 series), polished stainless steel upon request

Installation Tools

Jig	Universal milling frame
Door	routing template No. 5 251103 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

Also the load capacities of the respective combined receiver and the material thickness of the steel frame have to be taken into consideration.

For adjustment instructions see page 25.

A reinforcement for the steel door is available upon request - see page 21.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15.

Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

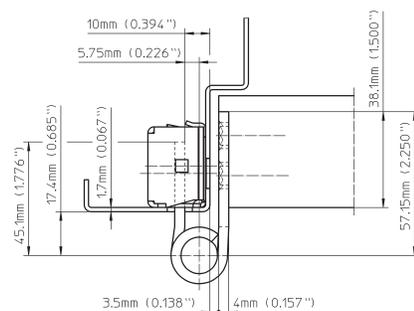
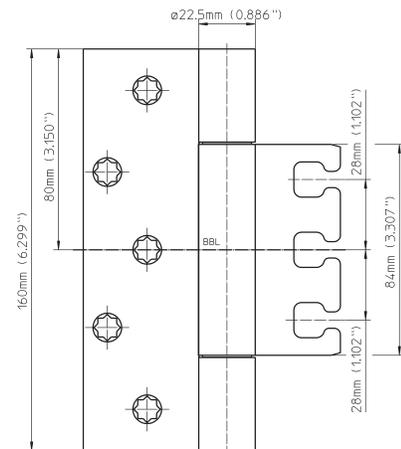
Kit consists of

Kit 1	Hinge	VX 7729/160-4 x 4-1/2" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/160-4 x 4-1/2" K
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 machine screws 12 x 1/2"



Receiver VX 7511 3D

Cover Plate



VARIANT® VX - RECEIVER OPTIONS



VX 7501 3D

For 2" thick wood frames

Receiver		wooden frame/door
----------	--	-------------------

Product Features

- For wood frames/doors
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")

Finish

galvanized

Combination

Cover Plate (satin stainless steel)		VX 7560 KK
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Note

Receiver ordered separately.



VX 7511 3D

For steel frames

Receiver		steel frame/door
----------	--	------------------

Product Features

- For steel frames/doors
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")

Finish

galvanized, satin stainless steel (304 series)

Note

Same receiver is also available without welding dimples – model number VX 7512 3D.
Receiver included in kit.



VX 7521 3D

For aluminum frames

Receiver		aluminum frame/door
----------	--	---------------------

Product Features

- For aluminum frames/doors
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")

Finish

galvanized

Note

Receiver ordered separately.

VARIANT® CARE

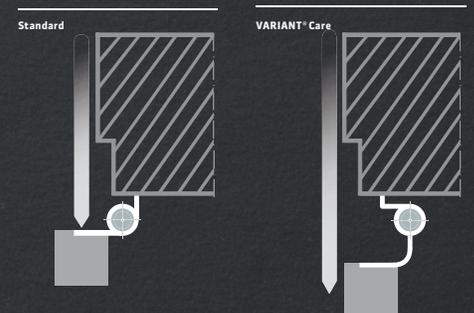
THE HINGE SYSTEM FOR COMMERCIAL DOORS WITH SWING-CLEAR REQUIREMENTS

SIMONSWERK recognizes the value in maximizing the clearance of an opening. When the door is opened to a 90° angle, the VARIANT Care hinge system provides a clear opening without the obstruction of the door. In addition, this hinge system offers a three-way adjustability feature.

Especially suitable for doors in health care facilities

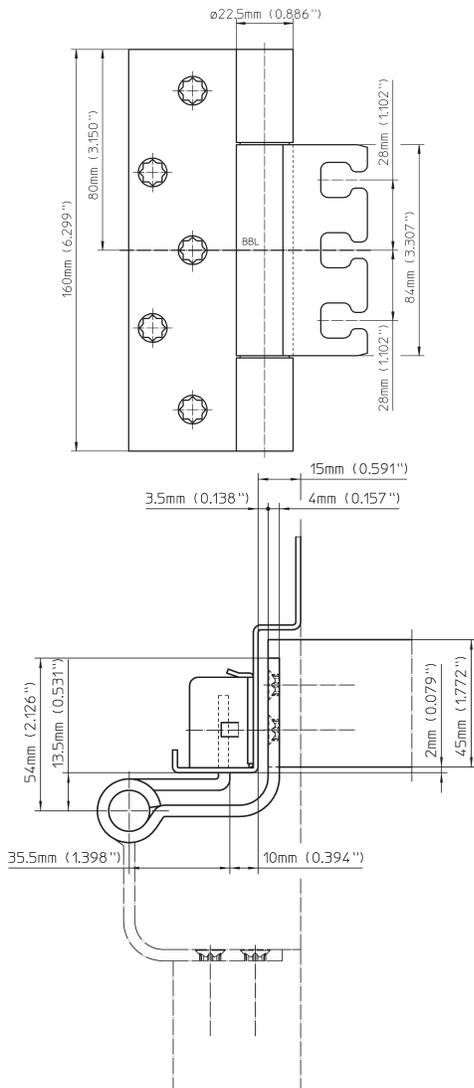
Easily adjustable in 3 dimensions with the simple turn of an Allen wrench

The VARIANT Care hinge system provides valuable clearance compared to a standard hinge.





Receiver VX 7511 3D Cover Plate



VX 7749/160-4 K Care Kit

For commercial doors in health care facilities

Hinge up to 100 kg (220 lbs.)

Product Features

- For flush commercial doors in health care facilities
- Free accessibility thanks to full frame opening
- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 5 mm Allen wrench
 - side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 3 mm (0.118")
- UL listed for 180 minute fire door

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	100 kg (220 lbs.)
Knuckle diameter	22.5 (0.886")
Material thickness	4.0 mm (0.157")
Screws	# 12
Opening angle	180°

Finish

satin stainless steel (304 series)

Installation Tools

Jig	Universal milling frame
Door	routing template No. 5 251103 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 25.

A reinforcement for the steel door is available upon request - see page 21.

For detailed information on the receiver VX 7511 3D and cover plate, see page 15.

Receiver for wood and aluminum doors available upon request.

NRP version available upon request.

Kit consists of

Kit 1	Hinge	VX 7749/160-4 K Care
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 wood screws 12 x 1-1/2"
Kit 2	Hinge	VX 7729/160-4 K Care
	Receiver	VX 7511 3D (incl. Cover Plate)
	Screws	5 machine screws 12 x 1/2"

VARIANT® COMPACT

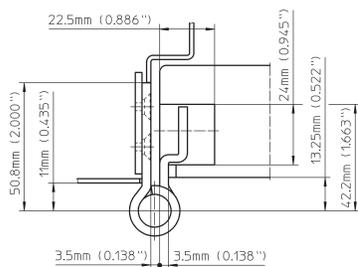
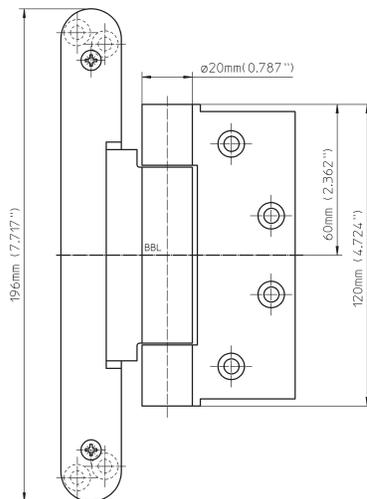
THE COMPACT ADJUSTABLE HINGE SYSTEM

With a three-way adjustable receiver installed in the door panel, VARIANT Compact has been tailored specifically to fit door frames with North American templates. This hinge is ideal for modern refurbishments where existing frames are utilized.

Leaf with integrated 3-way adjustment mounted in the edge of door panel

Fits North American templates, making it ideal as a retrofit hinge for renovations





VN 2927/4-1/2" x 4" K Compact Kit

For high performance commercial doors

Hinge	up to 120 kg (264 lbs.)
-------	-------------------------

Product Features

- Fits to existing standard frame prep of 4-1/2" x 4" butt hinge
- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 4 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 1 mm (0.039")

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	120 kg (264 lbs.)
Knuckle diameter	20 mm (0.787")
Material	304 stainless steel
Material thickness	3.5 mm (0.138")
Screws	# 12
Hinge length	114 mm (4-1/2")
Hinge width	101.6 (4")

Finish

satin stainless steel (304 series)

Installation Tools

Jig	Universal milling frame	
Door, Step 1	routing template	No. 5 251106 5
Door, Step 2	routing template	No. 5 251107 5
Door, Step 3	routing template	No. 5 251108 5
Frame	routing template	No. 5 251085 5

Application Range

Fire Resistant, Smoke Resistant

Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 28.

Kit consists of

Kit 1	Hinge	VN 2927/4-1/2" x 4" K Compact
	Screws	4 wood screws 12 x 1-1/2"
Kit 2	Hinge	VN 2927/4-1/2" x 4" K Compact
	Screws	4 machine screws 12 x 1/2"

VARIANT®

VN 2927/4-1/2" x 4-1/2" K Compact Kit

For high performance commercial doors

Hinge up to 120 kg (264 lbs.)

Product Features

- Fits to existing standard frame prep of 4-1/2" x 4-1/2" butt hinge
- For hollow metal frames and wood doors
- Maintenance-free slide bearings
- Easily adjustable in three dimensions by just turning a 4 mm Allen wrench
side +/- 3 mm (0.118"), height +/- 3 mm (0.118"), compression +/- 1 mm (0.039")

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

Technical Data

Load capacity	120 kg (264 lbs.)
Knuckle diameter	20 mm (0.787")
Material	304 stainless steel
Material thickness	3.5 mm (0.138")
Screws	# 12
Hinge length	114 mm (4-1/2")
Hinge width	114 mm (4-1/2")

Finish

satin stainless steel (304 series)

Installation Tools

Jig	Universal milling frame	
Door, Step 1	routing template	No. 5 251106 5
Door, Step 2	routing template	No. 5 251107 5
Door, Step 3	routing template	No. 5 251108 5
Frame	routing template	No. 5 251085 5

Application Range

Fire Resistant, Smoke Resistant

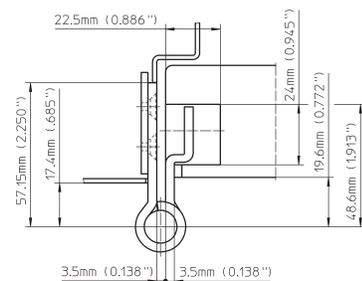
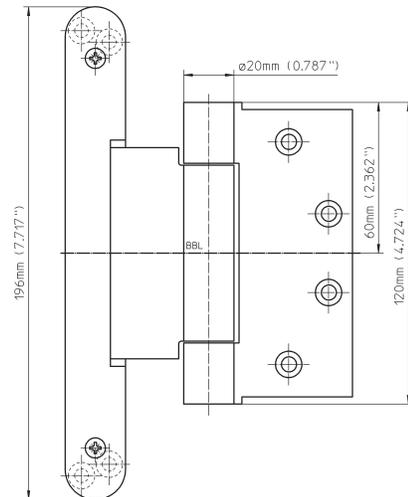
Note

The load capacity mentioned above refers to the use of 2 hinges per door leaf with a height/width ratio of 2:1.

For adjustment instructions see page 28.

Kit consists of

Kit 1	Hinge	VN 2927/4-1/2" x 4-1/2" K Compact
	Screws	4 wood screws 12 x 1-1/2"
Kit 2	Hinge	VN 2927/4-1/2" x 4-1/2" K Compact
	Screws	4 machine screws 12 x 1/2"





Reinforcement

For commercial steel doors

Reinforcement

Product Features

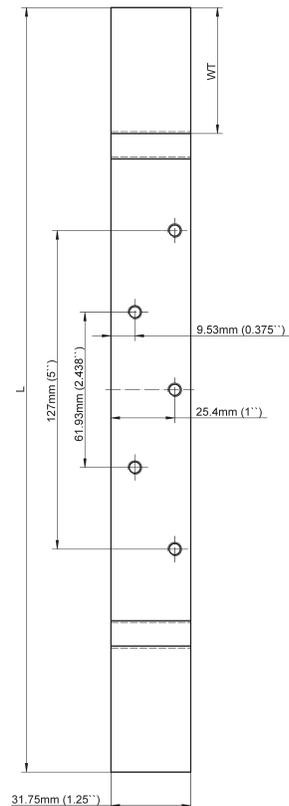
- Heavy duty 7-gauge steel
- Threaded for #12 machine screws

The specification text can be downloaded from the PRODUCTSELECTOR at www.simonswerk-usa.com.

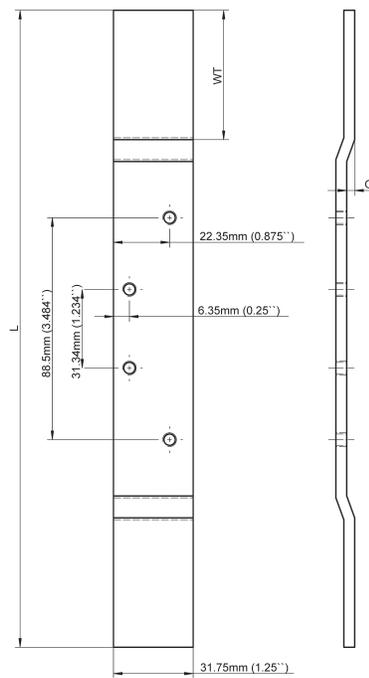
Hinge	L	WT	O	Reinforcement
VX 7729/4-1/2" x 4"	10	2	0.078	Reinforcement VX 7729/4-1/2"
VX 7729/4-1/2" x 4-1/2"	10	2	0.078	Reinforcement VX 7729/4-1/2"
VX 7729/160 x 4"	12	2	0.078	Reinforcement VX 7729/160
VX 7729/160 x 4-1/2"	12	2	0.094	Reinforcement VX 7729/160-4
VN 2927/4-1/2" x 4" K	10	2	0.078	Reinforcement VX 7729/4-1/2"
VN 2927/4-1/2" x 4-1/2" K	10	2	0.078	Reinforcement VX 7729/4-1/2"

Note

O (Offset) is based on 16/18 gauge steel material.
L = Length, WT = Welding Tab, O = Offset



VX 7729/160



VX 7729/4-1/2"

VARIANT®

Winbag

For a professional installation and adjustment

Accessory		steel frame/door
------------------	--	-------------------------

Product Features

- Quick and easy adjustment of doors
- Wedges are no longer necessary
- With an effective pump
- Soft air cushion avoids scratches

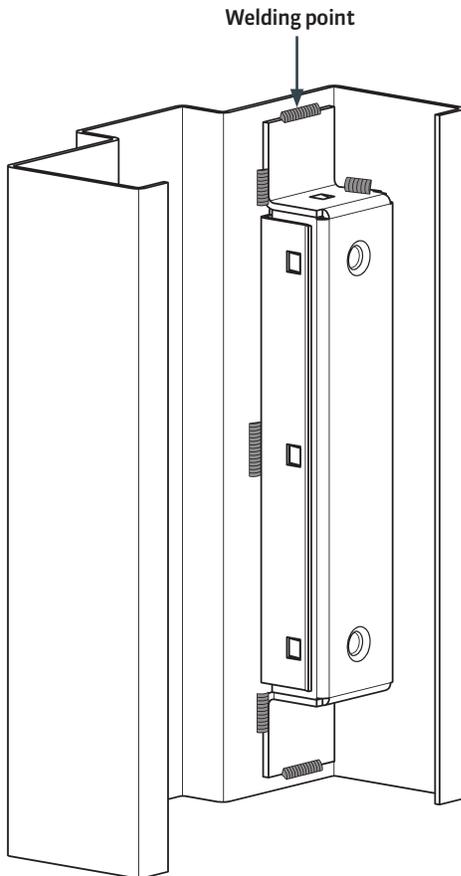
Technical Data

Load capacity	100 kg (220 lbs.)
Deflated size	152.4 x 165.1 mm (6" x 6-1/2")
Material	fiber reinforced material

Note

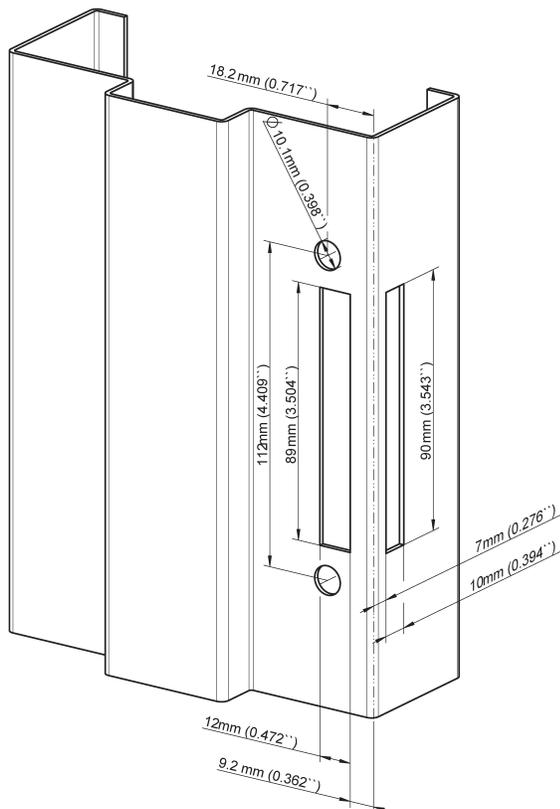
To increase load capacity use additional Winbags.





Preparation VARIANT VX

Note recommended welding point locations. Frame must be prepped and receiver welded before installing frame.



Frame Preparation for VARIANT VX 7511/7512 3D

Note recommended welding point locations. Frame must be prepped and receiver welded before installing frame.

VARIANT®

Installation VARIANT VX

For wood doors begin at step 1.

For metal doors skip to step 3.

Prepare the hinge mortise for the door leaf.

1

Fasten door leaf using supplied screws.

2

Remove and discard shipping plate.

- Insert flat-head screw driver into slot at the bottom of the cover plate.
- Set aside cover plate and replace when finished.
- Loosen 3 adjustment screws with 5 mm Allen wrench.

3

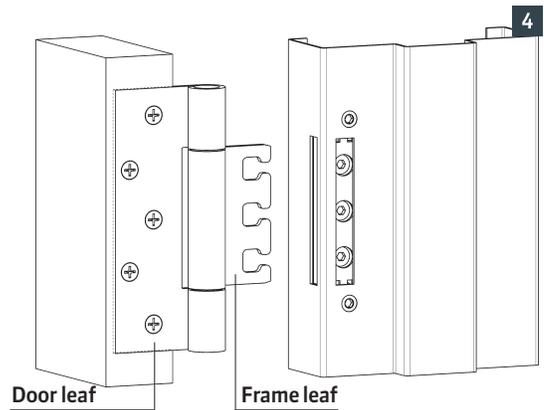
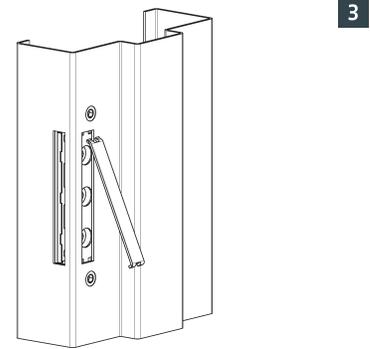
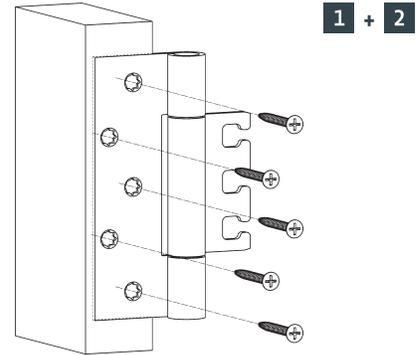
Insert frame leaf in receiver slot.

Note: Make sure slot is wide enough to accept the frame leaf.

4

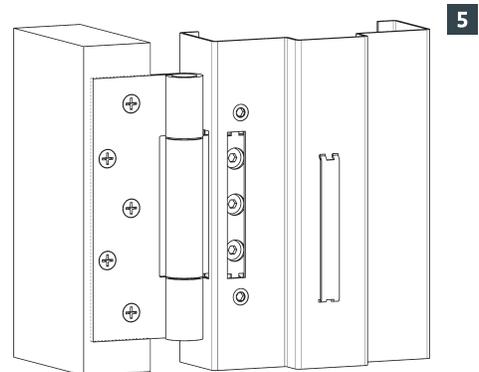
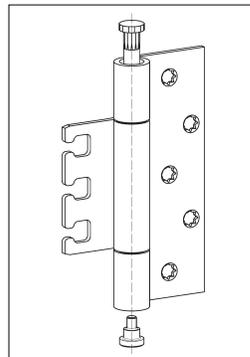
Insert cover plate.

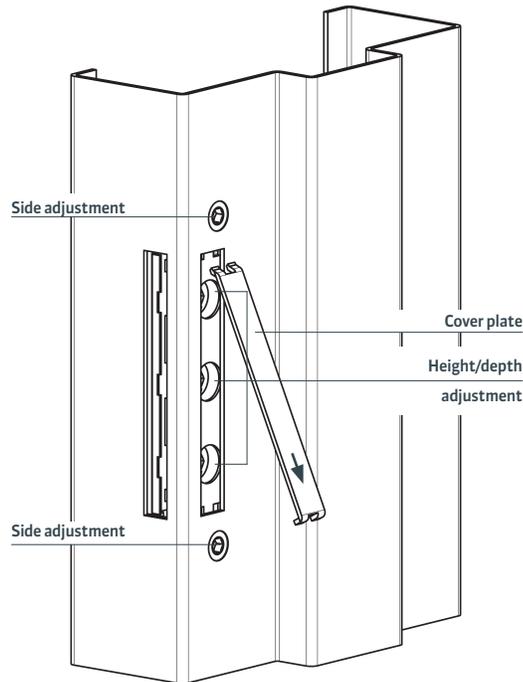
5



Note

Hinges are non-handed. They are shipped for left hand swing. If installing for right hand swing, remove the pin and screw and replace in opposite positions. Use care not to remove bushings.





Adjustment VARIANT VX

Three way adjustable

Side	+/- 3 mm (0.118")
Height	+/- 3 mm (0.118")
Depth	+/- 3 mm (0.118")

Side adjustment (horizontal)

- Adjust side adjustment screws equally to avoid tension on the axis with a 5 mm (0.197") Allen wrench
Note: Proper alignment between upper and lower side adjustment screws as well as upper and lower hinges is crucial for functionality.
- Turn the side adjustment screw counterclockwise for increasing the margin between door and frame on the locking side
- Turn the side adjustment screw clockwise for decreasing the margin between door and frame on the locking side

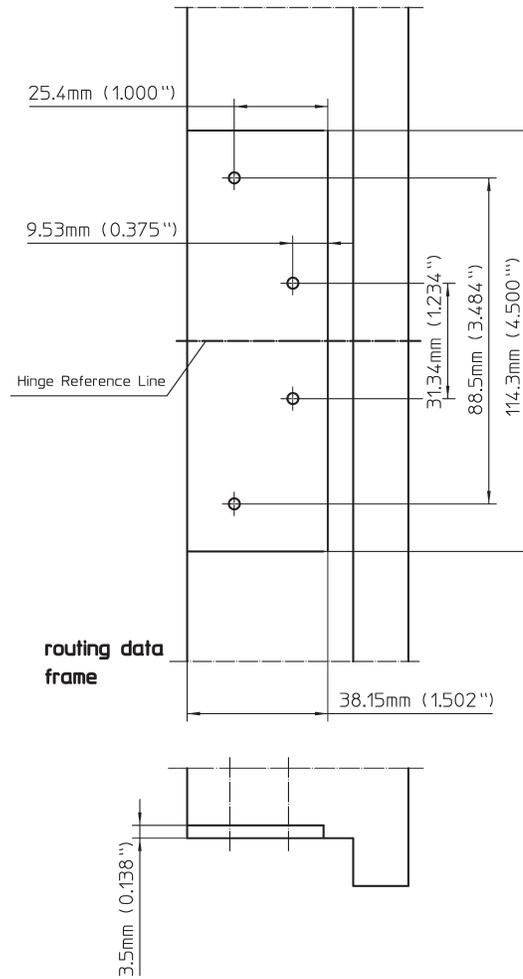
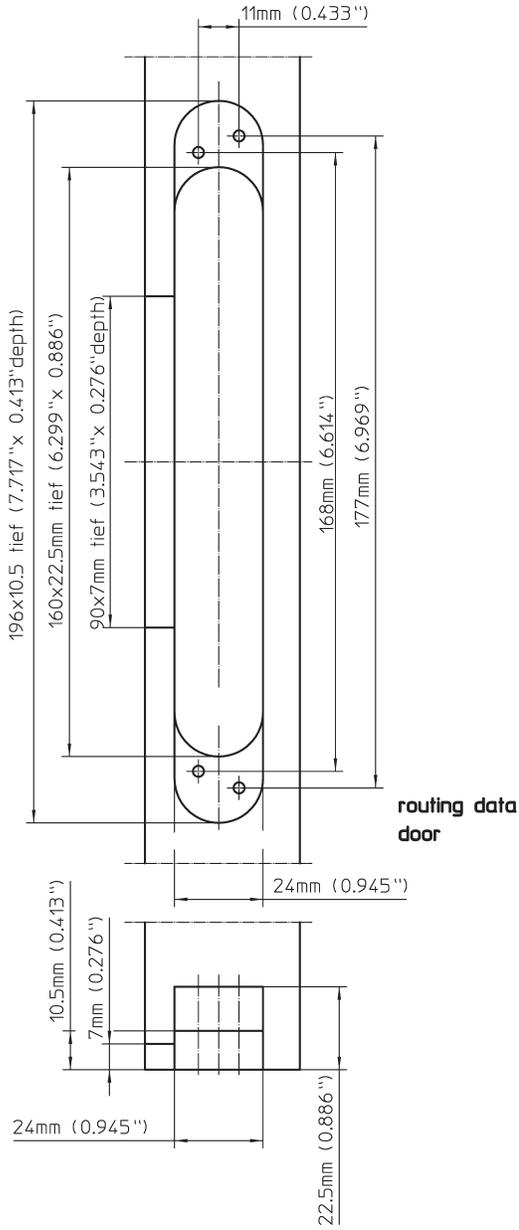
Height (vertical) and depth (in/out) adjustment

- Place small flat head screw driver under slot of cover plate below arrow
- Lift out cover plate and remove until adjustment is complete
- Support the door using a Winbag (see page 22) or other optional wedge
- Slightly loosen all clamping screws of each receiver on all hinges with a 5 mm (0.197") Allen wrench
- Adjust the height and depth position of the door manually
- Retighten the clamping screws of each receiver on all hinges
- Reinstall cover plate by inserting upper tabs of the cover plate first and pushing into place with arrow pointing down

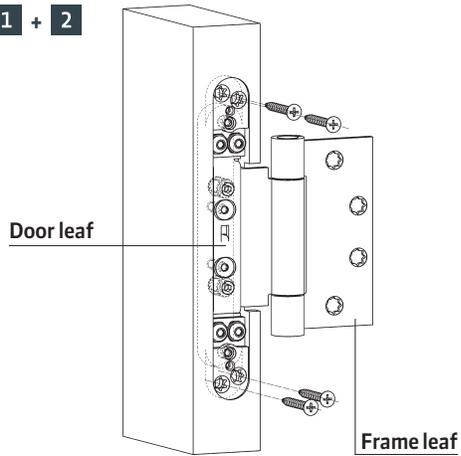
All adjustments can be performed with a 5 mm (0.197") Allen wrench.

VARIANT®

Preparation VARIANT Compact



1 + 2



Installation VARIANT Compact

Prepare the hinge mortise for the door leaf.

1

Install door leaf as shown.

2

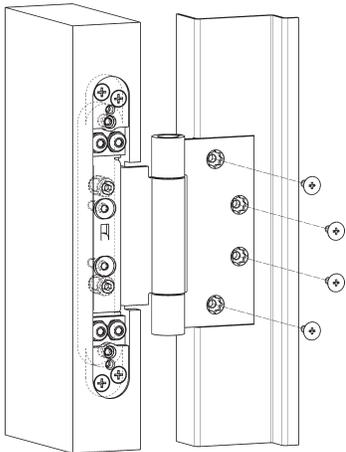
Fasten frame leaf with supplied screws.

3

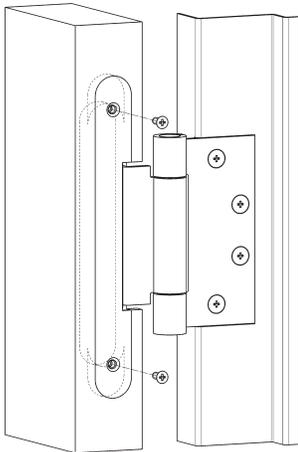
Fasten cover plate with supplied screws.

4

3



4



VARIANT®

Adjustment VARIANT Compact

Three way adjustable

Side	+/- 3 mm (0.118")
Height	+/- 3 mm (0.118")
Depth	+/- 1 mm (0.039")

Side adjustment (horizontal)

- Adjust side adjustment screws equally to avoid tension on the axis with a 4 mm (0.157") Allen wrench
Note: Proper alignment between upper and lower side adjustment screws as well as upper and lower hinges is crucial for functionality.
- Turn the side adjustment screw counterclockwise for increasing the margin between door and frame on the locking side
- Turn the side adjustment screw clockwise for decreasing the margin between door and frame on the locking side

Height adjustment (vertical)

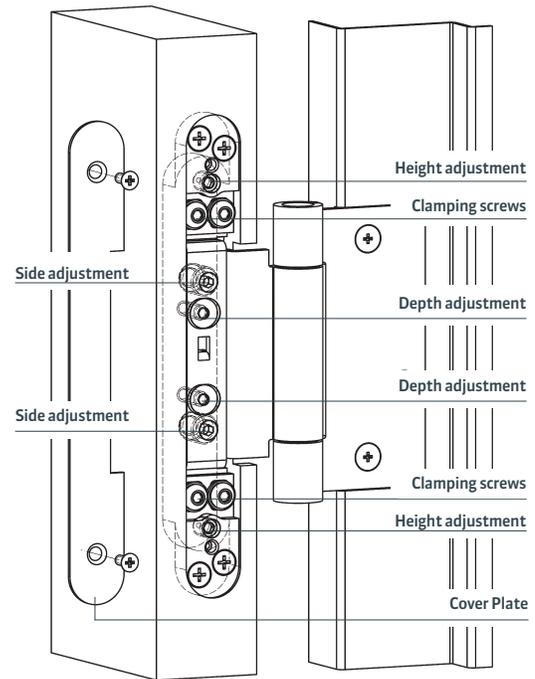
- Slightly loosen all clamping screws of all hinges with a 4 mm (0.157") Allen wrench
- Loosen upper height adjustment screw on all hinges until each screw is flush with surface
- Adjust the lower height adjustment screw on all hinges
 - Turn screw clockwise to raise the door
 - Turn screw on all counterclockwise to lower the door
- Note: Support the door using a Winbag (see page 22) or other optional wedge for heavy doors.
- Retighten all other height adjustment screws on all hinges until resistance can be felt
- Retighten all clamping screws firmly on all hinges

Depth adjustment (in/out)

- Slightly loosen all clamping screws with a 4 mm (0.157") Allen wrench
- Loosen the depth adjustment screws
- Set the door into desired position
- Retighten the depth adjustment screws
- Retighten all clamping screws firmly

Reinstall cover plate.

All adjustments can be performed with a 4 mm (0.157") Allen wrench.



THE ORIGINAL – HINGE SYSTEMS FROM SIMONSWERK

SIMONSWERK is a leading German manufacturer of heavy-duty, high performance hinge systems, producing premium hinges for over 125 years. As an industry pioneer for adjustable concealed door hinge systems, SIMONSWERK has built an impressive and extensive product offering including a wide range of architectural finishes for high-traffic and heavy-use doors. With a hinge system for nearly every application, SIMONSWERK constantly strives to meet the demand for innovative design solutions, utilizing functional tools to ensure a simple and smooth installation process. In addition, SIMONSWERK makes every effort to offer an outstanding customer service experience.



QUALITY AND INNOVATION

The SIMONSWERK brand stands for innovation and high standards of quality and service. These cornerstones date back as far as 1889, with customized solutions leading to the development of new products every year.

SIMONSWERK's quality requirements begin with the products, specifically in the selection of raw materials. Using high-quality materials allows for the largest possible freedom of design, providing diverse options for surface refinement and protection against corrosion.

State-of-the-art resources, including the latest manufacturing techniques and highly flexible automated production processes, make SIMONSWERK a competent partner for all aspects of door hinge technology. To meet the technical, safety and design requirements of modern architecture, SIMONSWERK hinge systems feature precise functioning, often exceeding demands and expectations.

A company's innovative strength is expressed through its competence and its responsibility to its customers in the marketplace. Longevity, top-quality products, and creative thinking give SIMONSWERK the ability to open new markets with new ideas.



SERVICE - COMPREHENSIVE EXPERTISE

In an effort to provide a complete service experience, SIMONSWERK has made available any documentation needed to determine the most suitable hinge system. The SIMONSWERK website can supply any information in addition to this brochure. Brochures, data sheets, fitting instructions and milling data can be requested in a printed version, or downloaded from the website.

An additional tool accessible through the SIMONSWERK website is the PRODUCTSELECTOR. This online aid helps select the right product for each project including accessories for specific applications. Specification text, CAD drawings and part numbers can be downloaded through the PRODUCTSELECTOR on the website.

For a more personal experience, contact our hinge system experts to collaborate on any project, from high-quality standard sets to the most complex solutions.

VISIT OUR PRODUCTSELECTOR

Whether a manufacturer, trade partner or designer, www.simonswerk-usa.com offers precise, detailed product descriptions to assist in your search for the most suitable hinge system.



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PRODUCTSELECTOR

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model description

brand

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scope of application

commercial interior doors

residential interior doors

entrance doors

function range

fire resistance, smoke resistance

soundproof

forced entry resistance

product type

hinges

receivers

accessories

receiver

type of door leaf

wood door

hollow metal door

rabbet

rabbet

rabbet flush

flush

type of frame

casing wood frames

commercial wood frames

hollow metal frames

aluminum frames

door weight (lbs)

61-88	353-440
89-176	441-661
177-220	
221-264	
265-352	



TECTUS Energy
Integrated and permanent energy transfer without ignoring the flush interior design.
→ view model versions



TECTUS Novelties
Overview of the latest TECTUS versions.
→ view model versions



TECTUS
The completely concealed hinge system.
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VISIT THE PRODUCTSELECTOR AT
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