## Parts Catalog Technical and Dimensional Data

# Heatfab Saf-T Vent® GC Plus

Single Wall Super-ferritic Stainless Steel UNS S44735 (29-4C) Special Gas Vent

For Venting Commercial & Industrial Applications

Condensing Appliances

Category I,II,III,IV Appliances

For Use on Negative, Neutral and Positive Pressures (up to 15" W.C.)

Sizes: 18"- 32" Diameters

\*Information provided on sizes up to 24" diameter; contact Heatfab customer service for additional information.





Tested and Listed UL 1738, ULC S636 by Underwriters Laboratories, Inc.

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*Information provided on sizes up to 24" diameter; contact			

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### Heatfab Saf-T Vent<sup>®</sup> GC Plus

Saf-T Vent GC Plus, large diameters, have the same joining system as Saf-T Vent CI Plus, combining the tight fit of the tapered male and female expands with a closure system which consists of tabs and a locking strap. The locking strap provides a mechanical connection between the two assembled sections. It also serves to pull together the two pieces, making a pressure-tight assembly. The locking strap is tightened from a single location using a simple hand tool. This single-point fastening system allows one installer to complete an assembly without rotating the sections or rotating himself around the sections.

#### Accessories:

**Sealant** — Use to seal the system. Approximate coverage is shown in the table below. These figures are based on a 1/4" bead of sealant, actual coverage may vary.

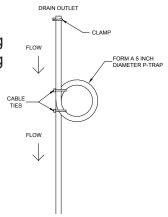
Maximum Appliance Flue Gas Temperature	U.L. Listed Heatfab Sealant	Size	U.L Listed Heatfab Sealant Part Number
550° F	Silicone	2.8 oz.	7000RTV
	Silicone	10 oz.	7000RTVL
	Viton/FKM	12 oz.	7000FKM

Approx Number of Joints for Sealant				
Inner Vent Diameter, Inches	3 oz Tube	10 oz Cartridge		
18	4	14		
20	4	13		
22	3	12		
24	3	11		

**Condensate Drain Tube Kit** — This kit contains a length of high temperature silicone rubber tubing, a clamp, and two cable ties. The silicone tubing is rated for 500°F, and is translucent to allow inspection of the P-trap. Larger diameter drains can be plumbed directly into a drain system.

Part Number:

7000TUBE 7000TUBE-10 7001TUBE 5 feet of 3/8" diameter tubing 10 feet of 3/8" diameter tubing 10 feet of 1/2" diameter tubing



### Heatfab Saf-T Vent<sup>®</sup> GC Plus

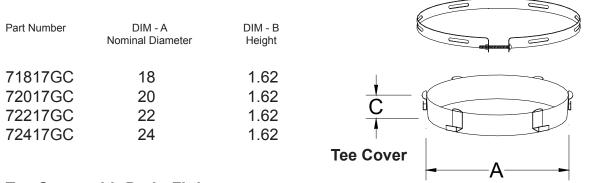
#### Accessories:

**In-Line Drain Section** — Use to drain away condensate from the vent system. Continuous horizontal runs in excess of 30 feet require a condensate drain. High temperature silicone rubber tubing is available separately, see below.

Part Number	DIM - A Nominal Diameter	DIM - B Installed Length	DIM - C Drain Location	DIM - D Drain Diameter (OD)	⊢-B-	•
71820GC	18	7.5	3	0.5		Å
72020GC	20	7.5	3	0.5		
72220GC	22	7.5	3	0.5		
72420GC	24	7.5	3	0.5		 _

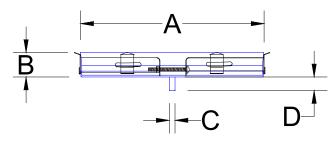
#### Covers:

**Tee Cover**— Used to cap off the male end of a tee that is installed horizontally. The combination of a tee and a tee cover allows for the future addition of appliances to a common-vent system. When Saf-T Vent GC Plus is used as a masonry chimney liner, a tee cover is used to cap off the bottom of a tee that is installed vertically.



**Tee Cover with Drain Fitting** — Use at the base of a tee or boot tee to drain away condensate from a vent system. This type of tee cover may also be used on the leg of a tee that is installed horizontally, to create a drain in a horizontal run. High temperature silicone rubber tubing is available separately from Heat-fab.

Part Number	DIM - A	DIM - B	DIM - C	DIM - D
	Nominal Diameter	Height	Drain Diameter OD	Drain Length
71817GCD	18	1.62	0.50	1
72017GCD	20	1.62	0.50	1
72217GCD	22	1.62	0.50	1
72417GCD	24	1.62	0.50	1



Tee Cover with Drain Fitting

**In-Line Drain Section** 

#### **Boot Tees:**

72216GC

72416GC

22

24

22

24

22

24

34.5

36.5

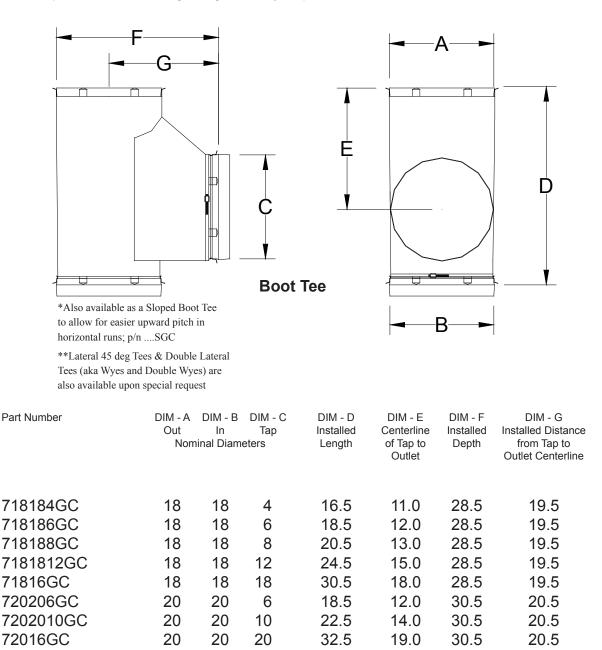
20.0

21.0

32.5

34.5

**Boot Tee** — Use vertically or horizontally to add appliances into a common-vent system. When installed horizontally, the male end of the tee body may be capped off with a tee cover to allow for future appliances. When used in conjunction with a drain tee cover, the boot tee will effectively transition a vent system from a horizontal to a vertical orientation while allowing for proper condensate drainage. The pressure drop for this fitting is equivalent to 15 feet of vent. Other diameter configurations may be available; please contact Heatfab engineering to discuss your special needs.



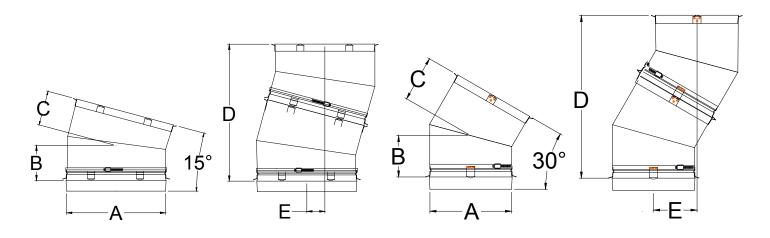
21.5

22.5

#### Elbows:

**15° Elbow** — Use to achieve offsets or changes in the direction of the vent system. The degree of these welded seam elbows is not adjustable. The pressure drop for each elbow is equivalent to 3 feet of vent.

Part Number	DIM - A Nominal Diameter	DIM - B Rise	DIM - C Run	DIM - D Combined Installed Height	DIM - E Offset
71809GC	18	5.2	5.2	20.4	2.7
72009GC	20	5.3	5.3	20.9	2.8
72209GC	22	5.4	5.4	21.4	2.8
72409GC	24	5.6	5.6	21.9	2.9



15° Elbow

30° Elbow

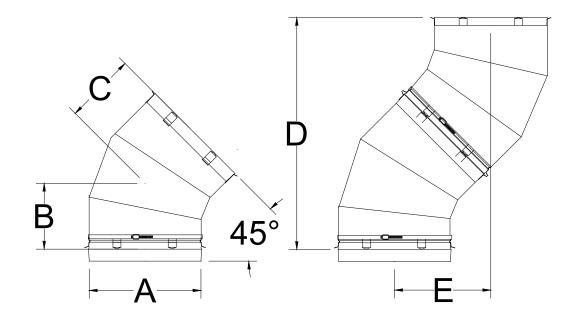
**30° Elbow** — Use to achieve offsets or changes in the direction of the vent system. The degree of these welded seam elbows is not adjustable. The pressure drop for each elbow is equivalent to 5 feet of vent.

Part Number	DIM - A Nominal Diameter	DIM - B Rise	DIM - C Run	DIM - D Combined Installed Height	DIM - E Offset
71810GC	18	6.1	6.7	24	6.4
72010GC	20	6.4	7.0	25	6.7
72210GC	22	6.6	7.2	26	7.0
72410GC	24	6.9	7.5	27	7.2

#### Elbows:

**45° Elbow**— Use to achieve offsets or changes in the direction of the vent system. The degree of these welded seam elbows is not adjustable. The pressure drop for each elbow is equivalent to 8 feet of vent.

Part Number	DIM - A Nominal Diameter	DIM - B Rise	DIM - C Run	DIM - D Combined Installed Height	DIM - E Offset
71811GC	18	9.1	9.7	32.0	13.3
72011GC	20	9.5	10.1	33.3	13.8
72211GC	22	9.9	10.5	34.8	14.4
72411GC	24	10.3	10.9	36.3	15.1



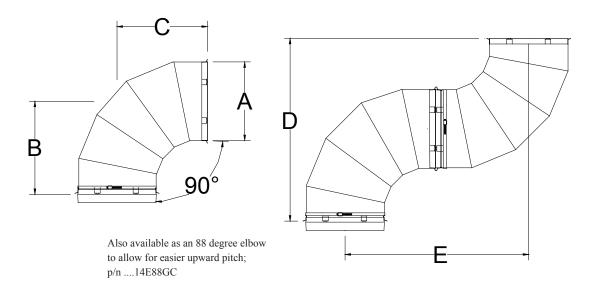
45° Elbow

#### Elbows:

**90° Elbow**— Use to achieve offsets or changes in the direction of the vent system. The degree of these welded seam elbows is not adjustable. The pressure drop for each elbow is equivalent to 15 feet of vent.

Part Number	DIM - A Nominal Diameter	DIM - B Rise	DIM - C Run	DIM - D Combined Installed Height	DIM - E Offset
71814GC	18	18.8	18.3	37	37
72014GC	20	19.8	19.3	39	39
72214GC	22	20.8	20.3	41	41
72414GC	24	21.8	21.3	43	43

Not available larger than 24" size



90° Elbow

#### **Straight Lengths:**

Horizontal and Vertical — Install vent with a continuous pitch of 1/4" per foot, sloping upward toward the termination (unless otherwise specified by the appliance manufacturer). It is important to provide adequate support to a Saf-T Vent system. Support horizontal portions of the vent system at 6-foot intervals. Vertical sections should be supported at least every 30-feet and after every offset or transition.

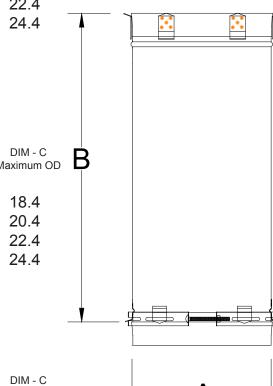
#### 6" Length

Part Number	DIM - A Nominal Diameter	DIM - B Installed Length	DIM - C Maximum OD	
71801GC 72001GC 72201GC 72401GC	18 20 22 24	4.5 4.5 4.5 4.5	18.4 20.4 22.4 24.4	
12" Length				

DIM - C

18.4 20.4 22.4 24.4

Part Number	DIM - A Nominal Diameter	DIM - B Installed Length	M
71802GC 72002GC 72202GC	18 20 22	10.5 10.5 10.5	
72402GC	24	10.5	



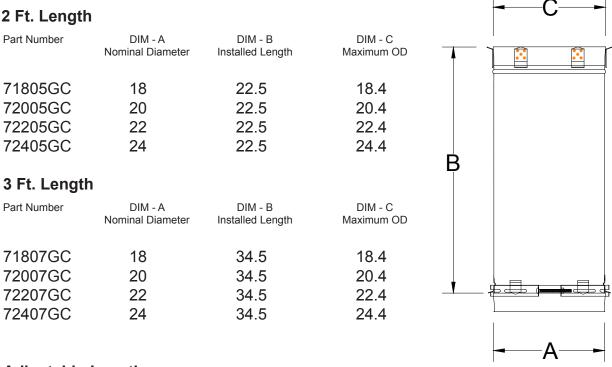
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#### 18" Length

Part Number	DIM - A Nominal Diameter	DIM - B Installed Length	DIM - C Maximum OD	
71804GC	18	16.5	18.4	
72004GC	20	16.5	20.4	
72204GC	22	16.5	22.4	
72404GC	24	16.5	24.4	

#### **Straight Lengths:**

**Horizontal and Vertical** — Install vent with a continuous pitch of 1/4" per foot, sloping upward toward the termination (unless otherwise specified by the appliance manufacturer). It is important to provide adequate support to a Saf-T Vent system. Support horizontal portions of the vent system at 6-foot intervals. Vertical sections should be supported at least every 30-feet and after every offset or transition.

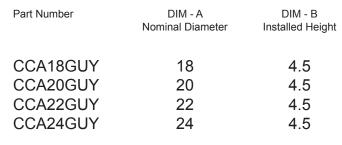


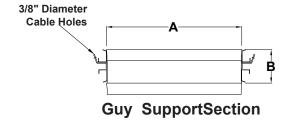
**Adjustable Length** — Use to accommodate distances not possible with the standard Saf-T Vent GC Plus lengths. The slip connector serves as an adjustable section and eliminates the need to cut parts to length. The Slip Connector can have an installed length from 12 to 21 inches. It works best in conjunction with another straight length of Saf-T Vent GC Plus. When used with an elbow or a tee, do not insert the Slip Connector so far that air flow within the vent becomes obstructed. When planning a venting system, include one slip connector for every change of direction and for any spans between two fixed points. Each slip connector comes with three components, a slip section, a male connector and a stainless steel hose clamp.

Part Number	DIM - A Nominal Diameter	DIM - B Minimum Installed Length	DIM - C Maximum Installed Length	DIM - D Slip Diameter		 ← D ?	C
71824GC 72024GC 72224GC 72424GC	18 20 22 24	12 12 12 12	21 21 21 21	17.9 19.9 21.9 23.9		 B	
					A		

#### Supports:

**Guy Support Section** — Provides vertical support using a part that is a flue-gas-carrying component of the vent system. Guy sections are primarily installed in long, inaccessible chases or used to provide support to systems with extended lengths above the roofline. Attach the guy section using stainless steel or galvanized cables or chain (supplied by others). Each guy section comes standard with one 5" long coupler and a joint locking strap, note: the coupler is not required for use on the GC Plus product.

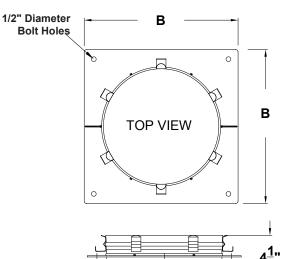




Vertical Support Section With Plate — Provides vertical stack support using a part that is a flue-gas carrying

component of the vent system. Framework is by others, utilizing typical construction components such as angle iron or unistrut type material. Each support section comes standard with one 5" long coupler and a joint locking strap, note: the coupler is not required for use on the GC Plus product.

Part Number	DIM - A Nominal Diameter	DIM - B Plate Size
CCA18VSP	18	22
CCA20VSP	20	24
CCA22VSP	22	26
CCA24VSP	24	28

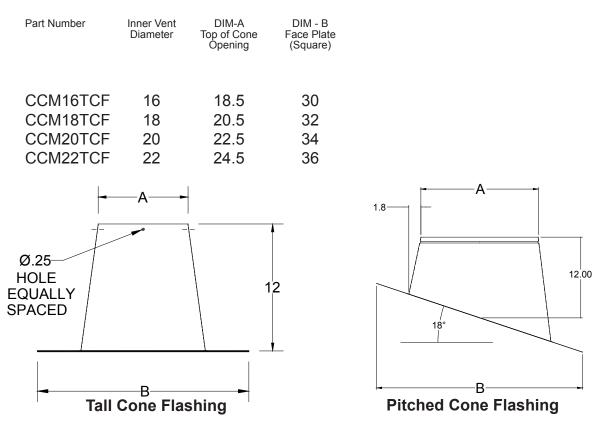


**Support Clamp** — For use on horizontal systems to provide support at the required 6-foot intervals. Support clamps by themselves do not maintain the necessary clearances to combustible materials; be sure to consider clearances when planning the system. Support clamps are sold in pairs, with two half-shells, and two 1/4-20 nuts and bolts. This part is made from 18-gauge Type 304 stainless steel and should not be installed in the direct path of flue gases. Never drill or screw through the flue bearing conduit.

Part Number	DIM - A Nominal Diameter	
41827SS	18	Support Clamp
42027SS	20	Used singly as a saddle to rest the vent in
42227SS	22	or use in pairs to clamp around the vent;
42427SS	24	suspend from rods or cables.

#### Supports:

**Tall Cone Flashing and Support**— Use as a vertical roof penetration/support in conjunction with a combustible chase. Can be used with a roof curb if needed. Can be used on metal roofs with a 2-12 pitch. This part comes with a storm collar and support screws and is of all stainless steel construction. A Vented Termination Collar *must* be used when installed in a combustible chase and must be ordered separately. Can be used with Saf-T Vent GC Plus vent when clearance to combustibles are maintained. CAUTION: the support screws can *only* be installed with Saf-T Vent CI Plus/CI 316 venting.



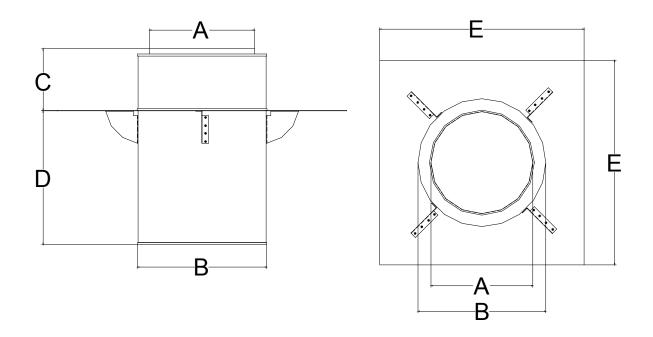
**Pitched Tall Cone Flashing** — Use as a vertical roof penetration in conjunction with a combustible chase. Can be used on roofs with a 2/12 - 6/12 pitch. This part comes with a storm collar and is of all stainless steel construction. A Vented Termination Collar *must* be used when installed in a combustible chase and must be ordered separately. Can be used with Saf-T Vent GC Plus vent when clearance to combustibles are maintained.

Part Number	Inner Vent Diameter	DIM-A Top of Cone Opening	DIM - B Face Plate (Square)
CCM16TCFP	16	19.5	34
CCM18TCFP	18	21.5	36
CCM20TCFP	20	23.5	38
CCM22TCFP	22	25.5	40

#### Thimbles & Penetrations:

**Roof Jack Support System**— For use with Saf-T Vent systems with vertical terminations. Use to pass through combustible and non-combustible roof structures. The roof jack support system must be installed on a flat roof or a level curb only. Each roof jack support system includes a storm collar that provides support and, when sealed, acts as a water barrier.

Part Number	Nominal Diameter	DIM - A ID of Roof Jack	DIM - B OD of Roof Jack	DIM - C Height Above Roof Line	DIM - D Height Below Roof Line	DIM - E Plate Size
51880CI 52080CI 52280CI	18 20 22	18.5 20.5 22.5	21.1 23.1 25.1	7.25 7.25 7.25	15 15 15	30 32 34
52480CI	24	24.5	27.1	7.25	15	36



**Roof Jack Support System** 

#### Thimbles & Penetrations:

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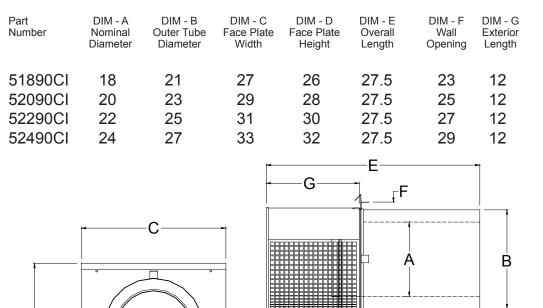
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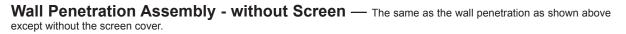
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B

D

**Wall Penetration & Horizontal Termination** — For Saf-T Vent systems with horizontal terminations. Use to penetrate any combustible or non-combustible wall. This part is a thimble only and does not include any vent. Order enough vent to pass through the thimble and extend 4-8 inches beyond the building sheathing. Includes an AL 29-4C screen cover to terminate the vent system. The assembly may be painted to match the exterior decor.





Screened Assembly

В

Without Screen

—E ∟F

А

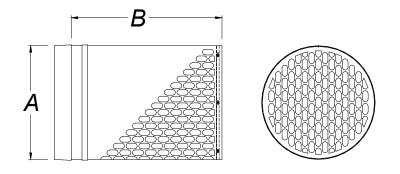
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Part Number	DIM - A Nominal Diameter	DIM - B Outer Tube Diameter	DIM - C Face Plate Width	DIM - D Face Plate Height	DIM - E Overall Length	DIM - F Wall Opening
51891CI	18	21	27	26	18.5	23
52091CI	20	23	29	28	18.5	25
52291CI	22	25	31	30	18.5	27
52491CI	24	27	33	32	18.5	29

#### Terminations:

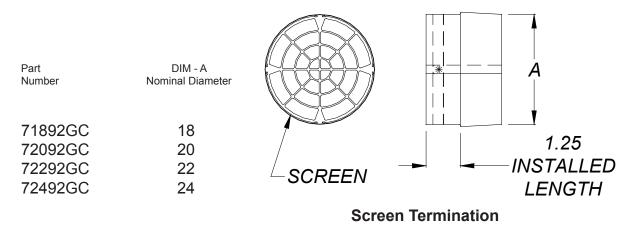
**Mitered Termination with Screen** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.

Part Number	DIM - A Nominal Diameter	DIM - B Installed Length
71890GC	18	18.50
72090GC	20	18.50
72290GC	22	22.25
72490GC	24	22.25



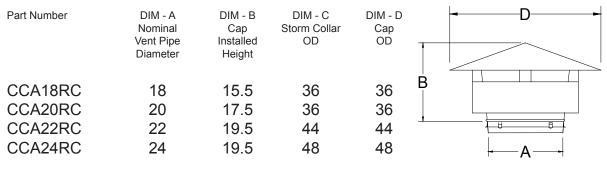
**Mitered Termination with Screen** 

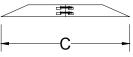
**Screen Termination** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.



#### **Terminations:**

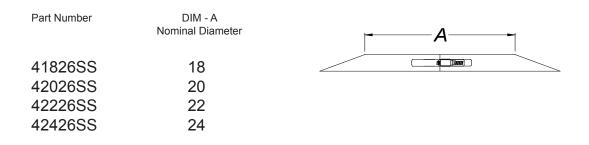
**Rain Cap** — Use as a termination on vertical systems. Category I and II appliances require a raincap or other device to prevent rainwater from entering the vent. Vent systems for positive pressure appliances may omit the raincap if there are other provisions for draining rainwater from the system. The raincap may also be used as a horizontal termination. Each raincap includes a storm collar that is used to attach the raincap to the vent system.





#### **Termination Accessories:**

**Storm Collar** — For use on horizontal or vertical systems when a Heat-fab wall or roof penetration is not used or is not required. The storm collar may be tightened and sealed around the vent to prevent water from entering the building. It may also be used as a decorative shield to cover holes where the vent penetrates interior concrete and masonry walls. This part is made from Type 304 stainless steel and should not be installed in the direct path of flue gases.



Notes:

Notes:

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