

## CLASSIFICATION OF SMARTBUILDER

Classification	SmartBuilder		P (Proximal)	BW (Buccal width)	BL (Buccal length)	BD (Buccal distance)	Code
	3D	Unfolded Image					
1 wall augmentation			4	8	7	5.5	SM1W487SB
			4	10	7	5.5	SM1W4107SB
			4	10	9	5.5	SM1W4109SB
2 wall augmentation			7	9	7	5.5	SM2W797SB
			7	9	9	5.5	SM2W799SB
			10	12	7	5.5	SM2W10127SB
			10	12	9	5.5	SM2W10129SB
			12	12	7	5.5	SM2W12127SB
			12	12	9	5.5	SM2W12129SB
3 wall augmentation			7	9	7	5.5	SM3W797SB
			7	9	9	5.5	SM3W799SB
			10	12	7	5.5	SM3W10127SB
			10	12	9	5.5	SM3W10129SB
			12	12	7	5.5	SM3W12127SB
			12	12	9	5.5	SM3W12129SB

## BUILT TO PROMOTE BONE FORMATION

SmartBuilder is a non-absorbable, titanium membrane used to regenerate periodontal tissue. SmartBuilder promotes bone formation in areas where natural bone defect has occurred.

- Customised for all degrees of bone defect

SmartBuilder is categorised as 1 wall augmentation, 2 wall augmentation, 3 wall augmentation according to the degree and form of bone defect. The membranes are then smart-adapted to fit the loss area.

- Designed to be profoundly user-friendly

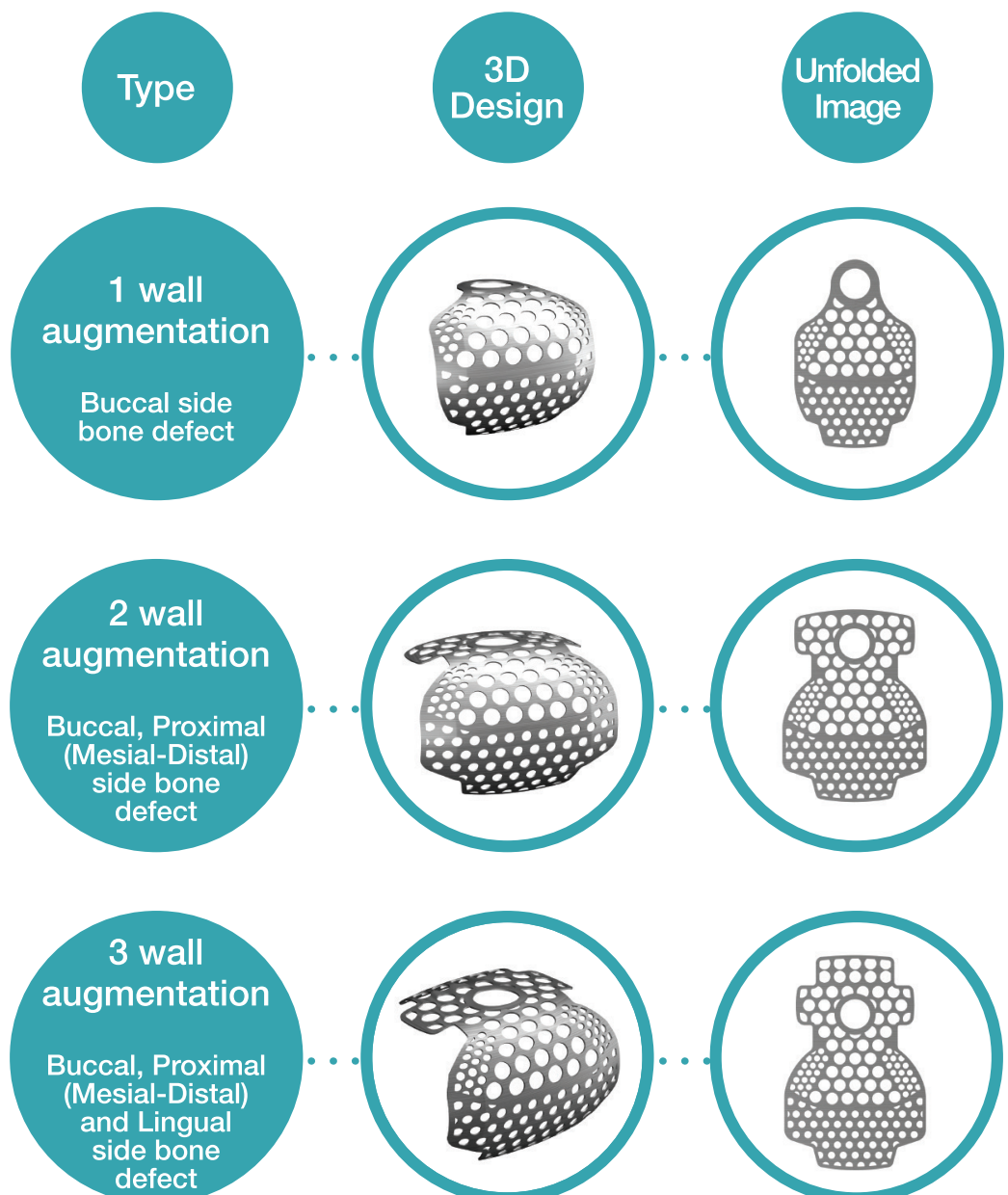
SmartBuilder is pre-formed 3D design that does not require additional trimming or bending.

- Punctured for better blood supply

SmartBuilder is covered with pore-like holes to increase the blood supply of the surgical site.

## SUITABLE FOR ALL SITUATIONS IN ALL PATIENT TYPES

Choose product according to the form and degree of bone defect, and also gingival tissue volume.



## SMARTER SOLUTIONS

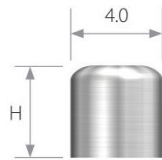
### Smart Handling

- Instantly mould with ease, or just use as formed. Applicable for both one-stage and two-stage surgeries. Easily fit and remove.

### Smart Healing

- Extreme durability and a wrinkle-free sphere-shaped appearance guarantee minimised membrane exposure, Sufficiently solid for reliable bone healing regeneration.

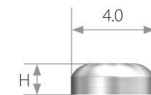
## COMPONENTS



### Healing Cap

			(mm)	
			Regular	
D	H		3	4
			Ø4.0	SMHA443R SMHA444R

- 1 stage procedure
- Torque application: 5~8Ncm
- 1.2 HEX hand driver placement

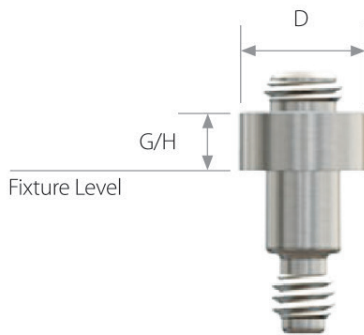


### Cover Cap

			(mm)	
			Regular	
D	H		1.5	
			Ø4.0	SMCC415

- 2 stage procedure
- Torque application: 5~8Ncm
- Cover Cap driver placement

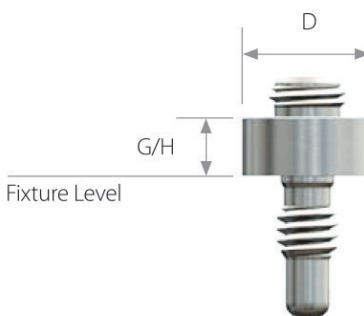
### Extension (for TS)



			(mm)	
			Mini	Regular
D			Ø3.5	Ø4.0
H				
	0.5		SMHI305TSM	SMHI405TSR
	1.0		SMHI310TSM	SMHI410TSR
	1.5		SMHI315TSM	SMHI415TSR
	2.0		SMHI320TSM	SMHI420TSR
	2.5		SMHI325TSM	SMHI425TSR
	3.0		SMHI330TSM	SMHI430TSR

- 2 stage procedure
- Torque application: 5~8Ncm
- Cover Cap driver placement
- SB, SB2 Compatible

### Extension (for US)



					(mm)			
					Mini	Regular	Wide	Wide PS
D					Ø3.5	Ø4.0	Ø5.1	Ø5.0
H								
	1.0				SMHI310USM	SMHI410USR	SMHI510USW	SMHI510USP
	1.5				SMHI315USM	SMHI415USR	SMHI515USW	SMHI515USP
	2.0				SMHI320USM	SMHI420USR	SMHI520USW	SMHI520USP
	2.5				SMHI325USM	SMHI425USR	SMHI525USW	SMHI525USP
	3.0				SMHI330USM	SMHI430USR	SMHI530USW	SMHI530USP

- 1.2 Hex hand driver placement
- Torque application: 12~15Ncm
- SB, SB2 Compatible



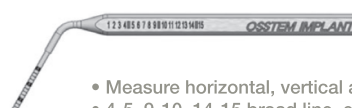
### Cover Cap Driver Ejector Set

Code	SMCDES
------	--------

- Cover Cap placement
- Friction placement structure
- Remove cover cap with Cap ejector
- Cap driver and Cap ejector set

### Defect Gauge

Code	SMDG
------	------



- Measure horizontal, vertical amount of bone defect
- 4-5, 9-10, 14-15 broad line, each marked in 1mm units

## USER GUIDE

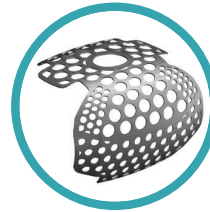
- Check the area of bone defect and select product
- Using a defect gauge, measure the horizontal and vertical bone defect of the surgical site to select the right type:



**1 wall augmentation**  
(Bone defect at buccal area)



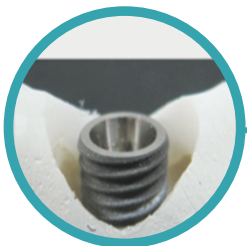
**2 wall augmentation**  
(Bone defect at buccal & proximal area)



**3 wall augmentation**  
(Bone defect at buccal area)

- Select the type of extension based on the vertical bone defect and place the Extension on the Implant. Use a 1.2 Hex driver to tighten the Extension in place with Torque applications of 12~15Ncm
- Graft the necessary amount of bone where the bone defect has occurred
- Place the selected SmartBuilder over the Extension. Bend or trim the product to fit the area of bone defect before fixing the SmartBuilder in place
- Use the Healing Caps or Cover Caps to fix the SmartBuilder in place. Tighten the Healing Cap with a 1.2 HEX driver, and the Cap using a Cap driver.
- Suture the gum of the surgical site closed
- Remove the Healing Caps or Cover Caps once the bone regeneration process has been completed. It's easier to remove the Extension using a 1.2HEX driver as the SmartBuilder will be simultaneously removed.

- Sequence of user's guide:



Buccal, Proximal (Mesial-Distal) and Lingual side bone defect



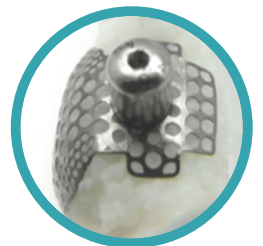
Connected with Extension



Bone Healing



SmartBuilder adaption and connected with Healing Cap



Procedure completed

## CAUTION

- The SmartBuilder, Extension, Healing Caps or Cover Caps must all be gamma irradiation sterilized and be disposed of after single use
- Product must not be used for any other than GBR procedures
- All surgical equipment must be sterilised in an autoclave before use. (For a duration of 15 minutes at a temperature of 132 degrees Celsius)
- Undergo procedures as required per case, but extreme procedures may expose the membrane to cause infections and impair bone formation

**Dr. Jo yong-suk**

**Apsun Dental Clinic**

- Seoul National University, Dental Medicine studies
- Clinical Professor, Chungbuk University
- Clinical Professor, Seoul National University



**SmartBuilder** is a highly useful material that has renewed the previous perceptions of titanium mesh and can be easily applied to different clinical cases.

**Dr. Jun In-sung**

**H Dental Clinic**

- Seoul National University, Dental Medicine studies
- Exchange Professor, Harvard University
- Clinical Professor, Seoul National University



**SmartBuilder** is capable of offering reliable and predictable results in terms of bone formation and managing the soft tissues.

**Dr. O Sang-yun**

**Acro Implant Centre**

- Chosun University, Dental Medicine studies
- Director, A.T.C Implant training session
- Chief, OMS (Oral and Maxillofacial surgery) centre, Chongju University



**SmartBuilder** boasts high convenience because it doesn't require bending or cutting, and also doesn't need a separate screw to keep it fixed.

**Dr. Yun Jong-III**

**Yun Dental Clinic**

- Kyunghee University, Dental Medicine studies
- Clinical Professor & Expert, Seoul National University



Even first-time users can expect predictable bone regeneration using the **SmartBuilder**.

**Dr. Kim Yong-jin**

**Apsun Dental Clinic**

- Dankook University, Dental Medicine studies
- Director, Concepts of Balanced Orthognathic Surgery of Korea



**SmartBuilder** is in a three dimensional form tailored to fit all types and sizes of the bone defect, meaning it's a completed form of titanium membrane that can be used without any additional adjustments.