SU-POR®
by PORIFEROUS®

Implants for Life™

2024 EDITION / V1

IMPLANTS FOR LIFE™

Su-Por Implants: A Safe and Reliable Choice for Surgical Implantation.

INDICATION

Su-Por Surgical Implants in block, sheet, and anatomic shapes are intended for the non-weight bearing applications of craniofacial reconstruction surgery and repair of craniofacial trauma. Su-Por Surgical Implants are also intended for the augmentation or restoration of contour in the craniomaxillofacial skeleton. Su-Por Surgical Implants are long-term, non-resorbable implants and are appropriate for all age groups.

PURE & BIOCOMPATIBLE

Su-Por Surgical Implants are developed from a highly porous polyethylene material. This material is pure and biocompatible, making it an excellent choice for patients with unique needs. The porous nature of the material allows for tissue ingrowth, ensuring that the implant stays in place and provides lifelong results. It is important to acknowledge the host's integrated vascular system, which has the ability to sustain the device without any infections. Su-Por Surgical Implants have historically resulted in an infection rate of less than 0.5%.

PROVEN TO BE SAFE

Safety is another significant advantage of Su-Por Surgical Implants. The material used in their production has been extensively tested and proven to be safe for use in the human body. Each implant is also delivered sterile by Ethylene Oxide and batch tested for bacterial endotoxin levels.

HIGHLY DURABLE

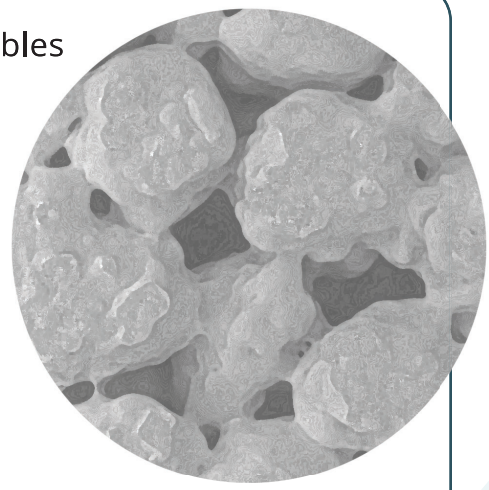
Su-Por Surgical Implants are highly durable and become a living graft. The vascular vessels that grow into the implant provide blood to carry intravenous antibiotics, host antibodies, or other cellular immune entities to fight bacteria. The implants are designed to withstand surgical rigors and deliver consistent results, ensuring that patients can enjoy the benefits of the implant for life.

ADVANCED TECHNOLOGY

- Easy to cut
- Easy to pass a needle through
- Retained Shape Memory™

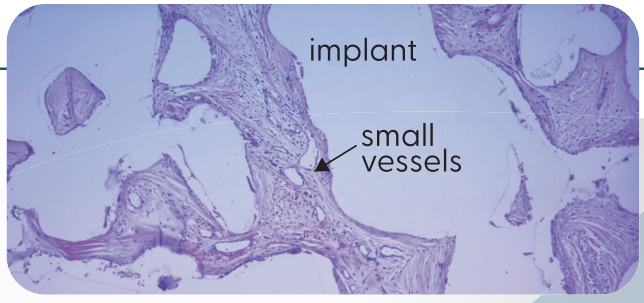
Groundbreaking Product That Offers A New Level Of Efficacy For Reconstructive Surgery.

The implant's open-pore structure enables integration with the body.



TRUSTED TECHNOLOGY WITH OVER 40 YEARS OF CLINICAL POST-OPERATIVE DATA.

With its innovative technology, an integrated Su-Por implant has its own blood supply, thanks to vascular fascia, making it an ideal option for full-thickness skin grafts.



The Su-Por implant promotes rapid tissue growth, becoming fully mucosalized in three to four weeks. Within three weeks of implantation, the implant typically integrates with fibrovascular tissue, and bone integration occurs after six weeks in recently cut areas.

INTEGRATION

IMPLANT

SOAKING THE IMPLANTS WITH ANTIBIOTIC SOLUTION

1. Prophylactic measure against any contaminates introduced during surgery.
2. Wetting implant allows for better, more complete, tissue integration.
3. Improves fibrovascular and bone ingrowth into implant's pores.

SYRINGE METHOD

Prepare antibiotic solution.

Select syringe to fit implant size.

Remove plunger & place implant inside.

Pull back on plunger, fill the syringe until implant is covered.

Place a gloved finger over the end of the syringe, pull plunger outwards, creating a vacuum.

Continue to pump back on plunger until no air bubbles emerge from implant.

Open syringe & remove soaked implant.

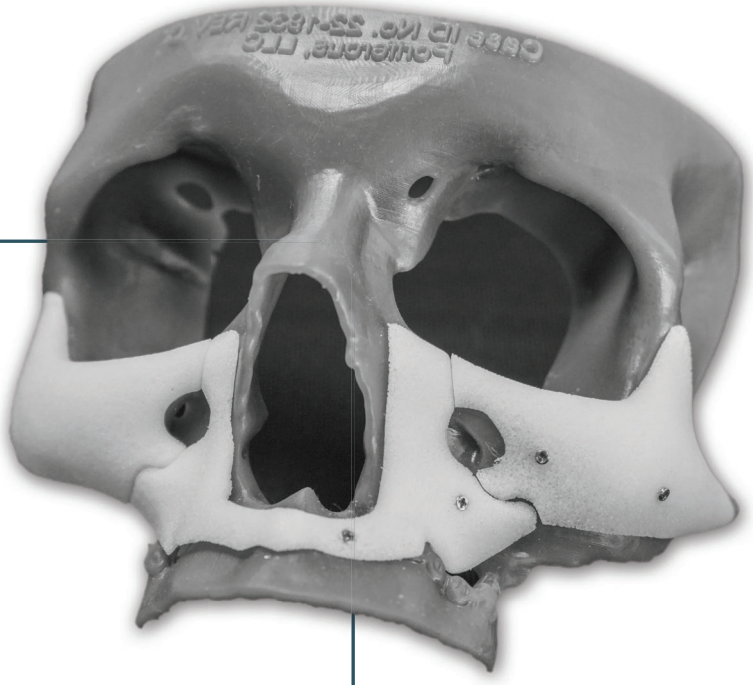
Place in surgical site without touching any other surfaces.

ANTIBIOTIC SELECTION

The solution is dependent on patient tolerance and antibiotic need. There are no known drug incompatibilities with porous polyethylene.

Do not use with antiseptic, betadine, or any other cytotoxic solutions.

PREPARATION



PRESOAKING & FIXATION

Presoaking in hot, sterile saline greatly facilitates the bending of thicker implants. Once cool, the implant maintains its shape. After initial carving, fixation with mini-or micro-screws prevents movement until tissue ingrowth occurs. Additional shaping can be done in situ. Soft-tissue resuspension can be performed prior to closure by passing the suture through the implant's surface.

STERILIZATION

All implants are provided sterile and non-pyrogenic.

CUTTING & CONTOURING

Su-Por Surgical Implants are readily cut with surgical instruments. The implants may be carved in the sterile field, or directly in vivo, to meet the needs of your patients. Su-Por retained shape properties allow the implant to be contoured, cut, formed, and molded for most shapes without the need of heating.

BIBLIOGRAPHY

Mraček, MD, PhD, Jan; P. Richtr; M. Seidl; J. Dostal; R. Tupy; V. Pyibay. (2021) Dilation of the scalp with subcutaneous expanders before secondary computer modeled cranioplasty from porous polyethylene Czech and Slovak Neurology and Neurosurgery 2022 Pages 92-95

Wallace, MD, Robert D.; Safak Uygur, MD; Petros Konofaos, MD, PhD; and Paul Klimo Jr. MD, MPH. (2023) Repair of Congenital Enlarged Parietal Foramina with Porous Polyethylene Implants The Journal of Craniofacial Surgery, Volume 34, Number 5, July/ August 2023 Pages 1548-1549 Mutaz B. Habal, MD

Arnon, Roee, Offer Gluck, Halit Winter, Joseph Winter, Joseph Pikkel, Avi Rubinov. (2019) Combined Single-Step Procedure for Correction of Silent Sinus Syndrome Case Reports in Ophthalmology March 19, 2019 Pages 95-100 S. Karger AG, Basel www.karger.com/cop

Burnstine, Michael A. (2019) Minimally Invasive Su-Por Suture Temporal Brow Suspension: The Lift and Fill Technique. Ophthalmic Plastic Surgery of the Upper Face 04.06.2019 Pages 81-85.

Chiou, MD, Carolina A.; Thad W. Vickery, MD; Edith R. Reshef, MD; Benjamin S. Bleier, MD; and Suzanne K. Freitag, MD. (2023) Endonasal Endoscopic Approach to Orbital Tumors International Ophthalmology Clinics, Volume 63.

Eder, Adrianna E, Sarah A Avila, Jordan Malenke, John M. Del Gaudio, and Ted Wojno. (2023) Intraosseous hemangioma of the orbit: A case report involving pre-operative embolization with reconstruction using a custom porous polyethylene implant The International Journal on Orbital Disorders, Oculoplastic and Lacrimal Surgery 27 March 2023, Taylor & Francis Group, LLC. https:// doi.org/10.1080/01676830.2023.2192778

Habib, Larissa A., Michael K. Yoon. (2021) Patient Specific implants in orbital reconstruction: A pilot study American Journal of Ophthalmology Case Reports 19 October 2021 Elsevier Inc. https://doi.org/10.1016/j.ajoc.2021.101222

Johnson, Thomas E. (2020) Anophthalmia: The Expert's Guide to Medical and Surgical Management 1st ed. 2020 Edition Springer December 24, 2019 100 – 101

Parikh, Alomi O.; Margaret L. Pfeiffer; Cindi K. Yim; Michael A. Burnstine. (2023) Implants and spacers forparalytic ectropion: Literature review and assessment of a thin-profile porous polyethylene implant Indian Journal of Ophthalmology 2022 Wolters Kluwer – Medknow www.ijo.in DOI: 10.4103/ijo.IJO_885_22

Piombino, Pasquale, Stefania Troise, Fabio Maglitto, Simona Barone, Lorenzo Sani, Umberto Committeri,Giovanna Norino, Paola Bonavolonta, Giovanni Salzano, Luigi Angelo Vaira, Giacomo De Riu, and Luigi Califano. (2022) Management of Orbital Floor Fractures: Our Experience in 10 Years Indian Journal of Otolaryngology and Head & Neck Surgery, Oct – Dec 2022, Pages 547-554 Association of Otolaryngologists of India 2022, Springer Nature https://doi.org/10.1007/s12070-022-03127-9

Prat, Daphna Landau; Said Massarwa, Assa Zohar, Ayelet Priel, Oded Sagiv, Ofira Zloto & Guy J. Ben Simon (2023) Patient – Specific Orbital Implants vs. Pre-Formed Implants for Internal Orbital Reconstruction Seminars in Ophthalmology 13 January 2023 Taylor & Francis Group https://doi.org/10.1080/08820538.2023.2166353

Sun, Yiyu; Gaoyang Wu, Zhaohua Jiang, Weigang Cao, Sheingi Li, Tingting Dai. (2022) Novel method forcorrecting cephalic rotation in Asian nasal tip plasty Journal of Plastic, Reconstructive & Aesthetic Surgery 2022 British Association of Plastic, Reconstructive and Aesthetic Surgeons Pages 315-321 https://doi.org/10.1016/j.bjps.2022.10.003

Walton, MD, FACS, Robert L.; Rosemary Seelaus, MAMS, CCA; and Brent R. Robinson, MD. (2019) Subtotal Nasal Reconstruction Using a Custom 3-Dimensional Porous Polyethylene Construct The American Society of Plastic Surgeons Plastic Reconstruction Surgery Global Open 11 December 2019 Wolters Kluwer Health, Inc.

Bonilla, MD, Arturo. (2018) Pediatric Microtia Reconstruction with Autologous Rib: Personal Experience andTechnique with 1000 Pediatric Patients with Microtia Facial Plast Surg Clin N Am 26 2018 Pages 57-68 https://doi.org/10.1016/j.fsc.2017.09.008

Johns, PhD, ABPP, Alexis L.; Daniel D. Im, MD; and Sheryl L. Lewin, MD. (2017) Early Familial Experienceswith Microtia: Psychosocial Implications for Pediatric Providers Sage Journals September 29, 2017 https://journals.sagepub.com/doi/10.1177/0009922817734358

Lewin, Sheryl. (2015) Complications after Total Porous Implant Ear Reconstruction and Their Management Atlas of Operative Craniofacial Surgery 2015 Pages 617-625 Georg Thieme Verlag KG, Thieme Medical Publishers https://www.thieme-connect.com/products/ejournals/ html/10.1055/s-0035-1567890

Lewin, MD, Sheryl; Rachel Bishop, DDS, MD; Jennifer E. Woerner, DMD, MD; David Yates, DMD, MD. (2021) Three Techniques for Reconstruction of Congenital Microtia: Porous Implant Ear Reconstruction, Auricular Reconstruction Using Autologous Rib, and Osseointegrated Craniofacial Implants with Auricular Prosthesis Atlas Oral Maxillofacial Surgery Clinic

Stephan, Scott, MD; and John Reinisch, MD. (2018) Auricular Reconstruction using Porous Polyethylene Implant Technique Facial Plast Surg Clin N Am 26 Pages 69 – 85 Elsevier Inc. https://doi.org/10.1016/j.fsc.2017.09.009

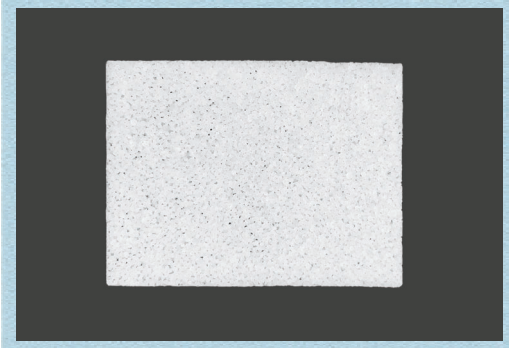
Pham, R. "Asian Nasal Dorsal Augmentation." Aesthetics and Refractive Surgery Medical Center. September 8, 2022. Lecture.

Burnstine, M. et. al. "Lateral Eyebrow Elevation with Su-Por AIRO BROW." Keck Medicine of USC. USC Roski Eye Institute. April 13th, 2020. Poster.

Ben Simon, G. et. al. "Custom Made Orbital Implants." Goldschleger Eye Institute. Shiba Medical Center. June 18, 2018. Lecture.

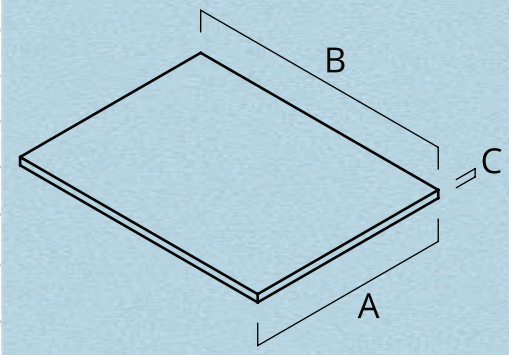
Landau, D. "Patient Specific Orbital Implants." Israeli Oculoplastic Society and Pediatric Ophthalmology Society Joint Meeting. Goldschleger Eye Institute. Chaim Sheba Medical Center. August 3, 2023. Lecture

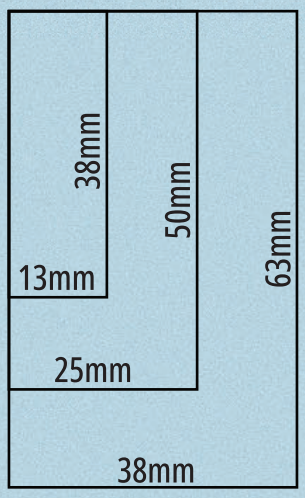
SHEET AND BLOCK

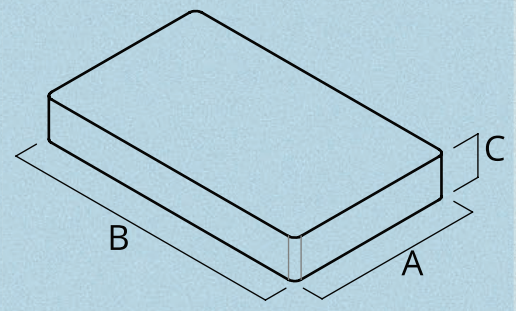


The Su-Por Sheet is designed to save the time and expense associated with harvesting graft material for craniofacial reconstruction and augmentation.

The Su-Por Block is thicker and allows for carving within the sterile field to obtain contours individualized for the surgical situations.







SU-POR Sheet

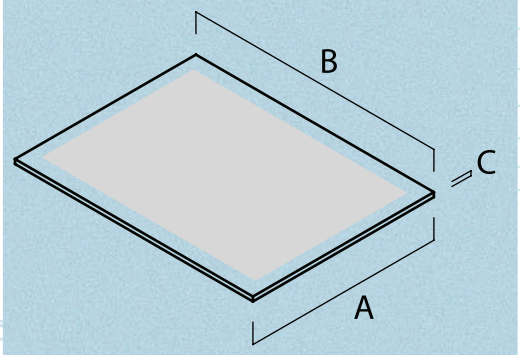
CAT#	A	B	C
4001	38	50	0.25
4002	50	76	0.25
4003	38	50	0.35
4004	50	76	0.35
4005	30	50	0.4
4006	38	50	0.45
4007	50	76	0.45
4008	38	50	0.85
4009	50	76	0.85
4012	38	50	1.5
4013	50	76	1.5
4015	38	50	3

SU-POR Block

CAT#	A	B	C
4019	13	38	3
4020	25	50	3
4021	38	63	3
4022	13	38	6
4023	25	50	6
4024	38	63	6
4025	13	38	9.5
4026	25	50	9.5
4027	38	63	9.5

MEMBRANE SHEET

The Su-Por Membrane Sheet is designed to save the time and expense associated with harvesting graft material for orbital floor reconstruction and augmentation. The implant has a composite structure, comprised of a porous layer heat-bonded to a nonporous, non-integrating plate.

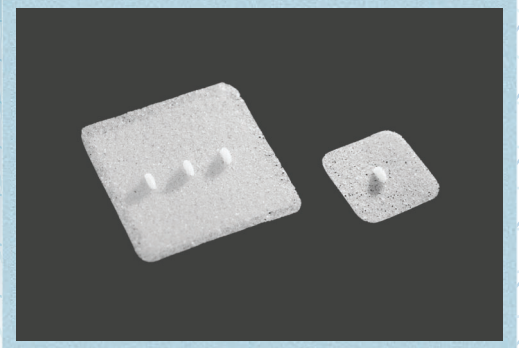


SU-POR Membrane Sheet

CAT#	A	B	C
4231	38	50	0.6
4016	38	50	1.0
4241	38	50	1.6
4017	50	76	1.0
4018	50	76	1.6

CRANIAL

SELLAR FLOOR

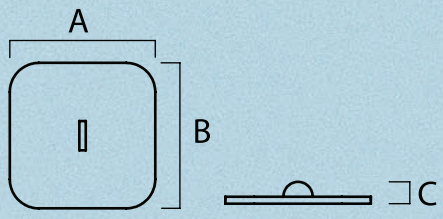


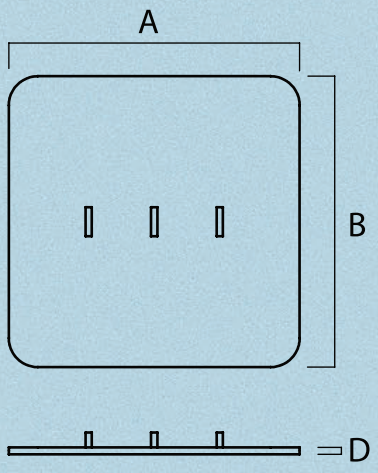
The Su-Por Sellar Floor is designed for sellar floor repair following a transsphenoidal approach to the pituitary.

The Sellar Floor Implant comes in two sizes and configurations:

The large Sellar Floor Implant features three tabs for ease of handling and placement.
The regular Sellar Floor version has a single tab.

The large Sellar Floor Implant has a nonporous polyethylene sheet bonded to its posterior surface, functioning as a barrier to prevent tissue ingrowth.



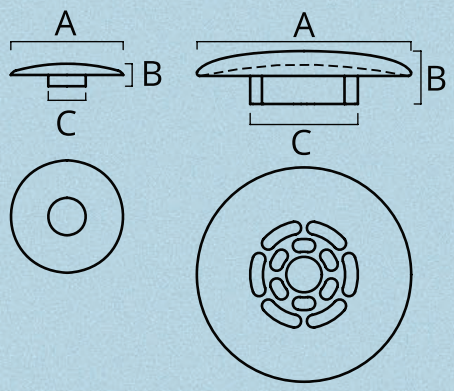


SU-POR Sellar Floor

CAT#	DESCRIPTION	A	B	C	D
4126	Regular	20	20	2.5	0.45
4129	Large + Membrane	40	40	2.5	0.73

BURR HOLE COVER

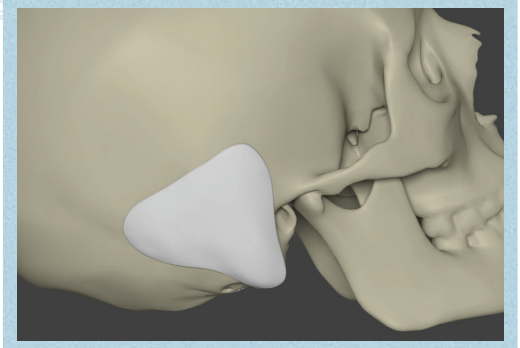
The Burr Hole Cover is designed to fit into and over holes made by a cranial perforator. It provides fixation while re-establishing healthy communication of the cancellous bone layer from the cranium to the replaced bone flap. Easily contoured using burr or scalpel for cosmetic appearance for smooth transition to bone.



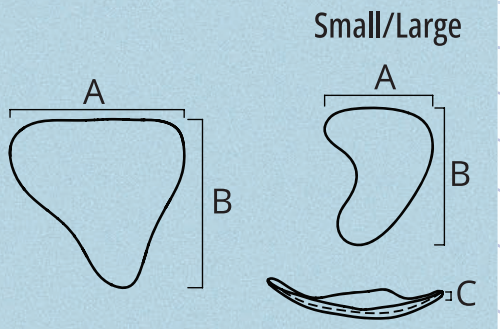
SU-POR Burr Hole Cover

CAT#	DESCRIPTION	A	B	C
4130	Small - Qty 3	15	3	5
4131	Large - Qty 3	29	7	14
4589	Small - Qty 1	15	3	5
4590	Large - Qty 1	29	7	14

MASTOID



The Mastoid provides surgeons with an excellent option for the repair of mastoid defects following removal of bone in the mastoid area. The Mastoid is available in left and right configurations, while the large and small sizes provide a universal fit. The implant should be trimmed at the time of surgery, ensuring the edges of the implant overlap the defect area and meet the specific needs of the patient.

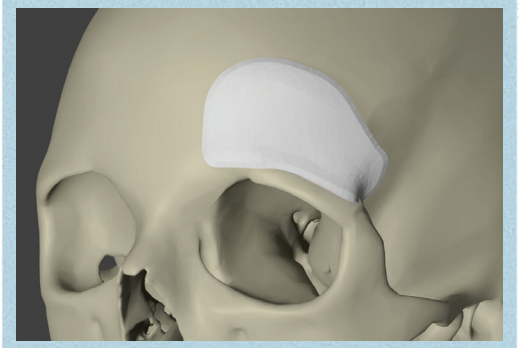


SU-POR Mastoid

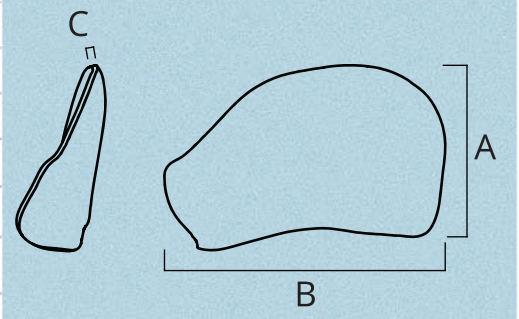
CAT#	DESCRIPTION	A	B	C
4132	Small	36	45	1.5
4133	Large	55.2	63	1.0
4124	Left	56	53.3	1.5
4125	Right	56	53.3	1.5

 Illustrations are not actual size. Please consult dimensional descriptions. All dimensions are in mm.

SUPRAORBITAL BROW



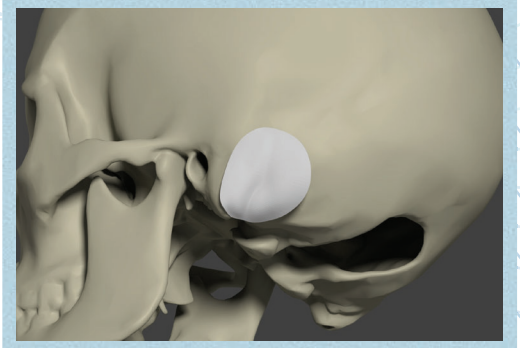
The Supraorbital Brow Implant design provides an excellent option for closure following the supraorbital approach. This implant incorporates an impervious layer on the dura facing side of the implant. The use of scissors allows for easy modification or shaping of implant. A scalpel or burr can be utilized to smooth the transition to the patient's bone directly in vivo.



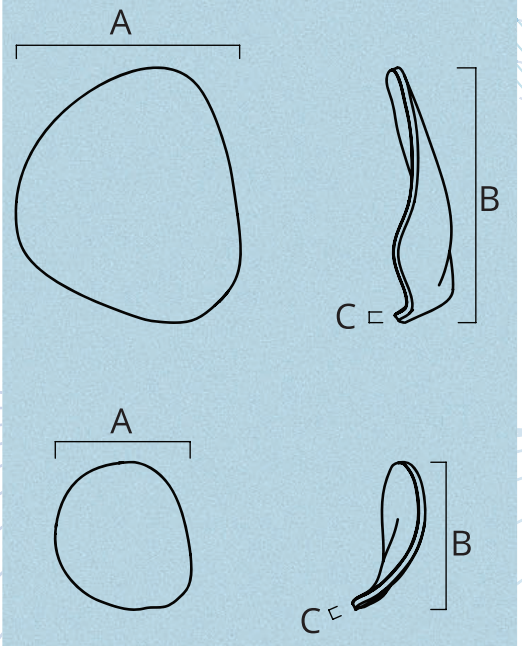
SU-POR Supraorbital Brow

CAT#	DESCRIPTION	A	B	C
4572	Left	34	55	1.5
4573	Right	34	55	1.5

RETROSIGMOID



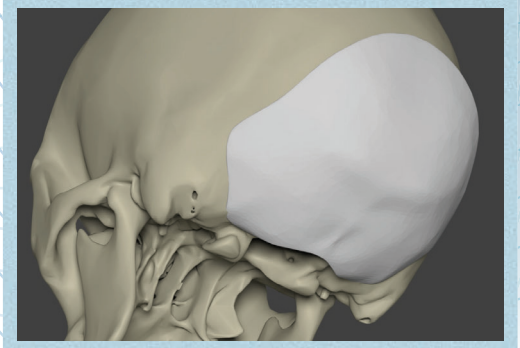
The Retrosigmoid Implant is an excellent option for use after a suboccipital craniotomy. The nonporous membrane layer on dura side reduces potential for dural adhesion. The implant is designed to be trimmed to meet the needs of the individual patient and overlap the defect.



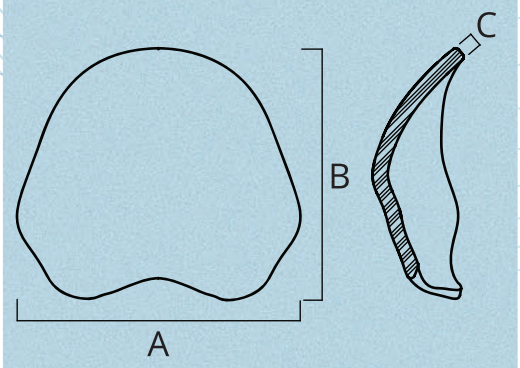
SU-POR Retrosigmoid

CAT#	DESCRIPTION	A	B	C
4566	Right	32.2	35	1.6
4567	Left	32.2	35	1.6
4568	Large - Right	52.6	58	1.6
4569	Large - Left	52.6	58	1.6
4562	Low Profile - Right	29	35	0.85
4563	Low Profile - Left	29	35	0.85
4564	Low Profile - LgRight	52.6	58	0.85
4565	Low Profile - LgLeft	52.6	58	0.85

OCCIPITAL



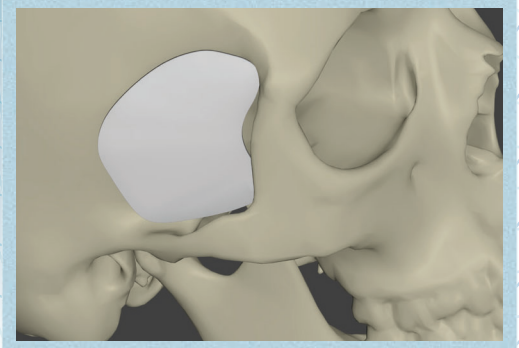
The Occipital Implant provides a reconstructive option for large cranial defects. The Occipital Implant also provides an alternative to customized implants, grafts, and other implant materials. This implant approximates shape of the occipital region while allowing surgeon to bend and trim implant to meet the needs of the individual patient.



SU-POR Occipital

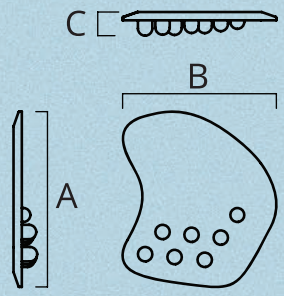
CAT#	DESCRIPTION	A	B	C
4439	Regular	114	101	6

PTERIONAL

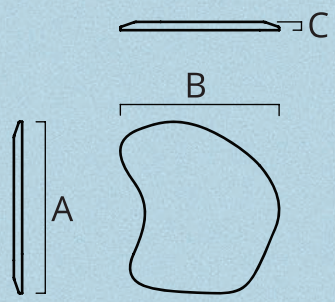


The Pterional is designed to correct temporal hollowing in patients who have had surgery involving the pterional approach to the brain. The implant is placed deep to the temporalis during closure.

Regular



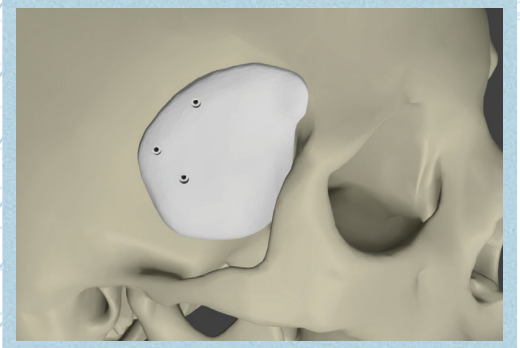
Smooth



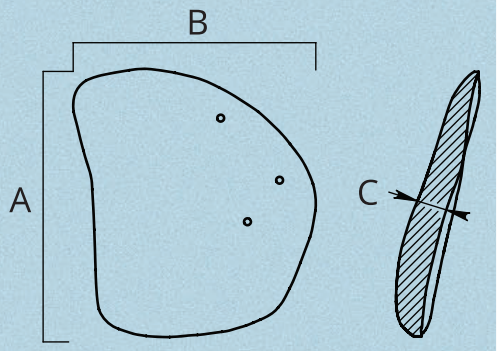
SU-POR Pterional

CAT#	DESCRIPTION	A	B	C
4122	Left	44	43	6
4123	Right	44	43	6
4467	Smooth - Left	46.3	43	2.25
4468	Smooth - Right	46.3	43	2.25

3D PTERIONAL



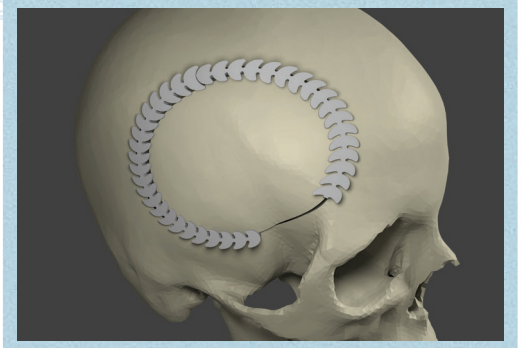
The 3D Pterional Implant is designed to correct temporal hollowing in patients who have had surgery involving the pterional approach to the brain. The contoured shape allows for a close approximation to the patient's anatomy. Standard fixation points are provided, however, surgeons have the option to place screws in any desired location.



SU-POR 3D Pterional

CAT#	DESCRIPTION	A	B	C
4469	Left	48	44	6
4470	Right	48	44	6

OSTEOTOMY GAP FILLER



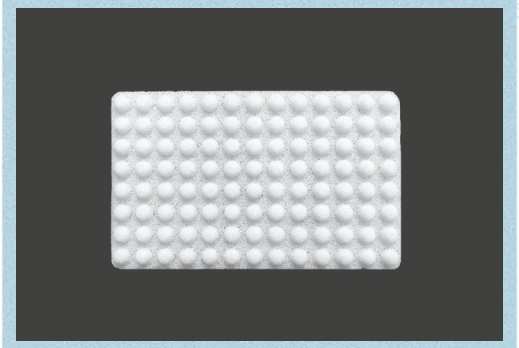
The Osteotomy Gap Filler is easy to work with for reconstructing bone gaps and produces excellent cosmetic results. Fibrovascular and bony ingrowth makes the implant stable, providing blood supply to the insolated bone flap's cancellous layer. The Osteotomy Gap Filler may eliminate the complication of using reclaimed bone dust from the patient for cranial gap closing.

SU-POR Osteotomy Gap Filler

CAT#	DESCRIPTION	A	B	C	D	E	F
4509	Tapered, 1ea	102	6	7	9	2.25	4
	Straight, 1ea	102	6	7	NA	2.25	NA

 Illustrations are not actual size. Please consult dimensional descriptions. All dimensions are in mm.

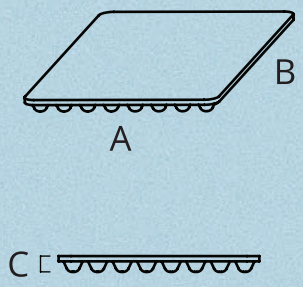
FLEX SHEET



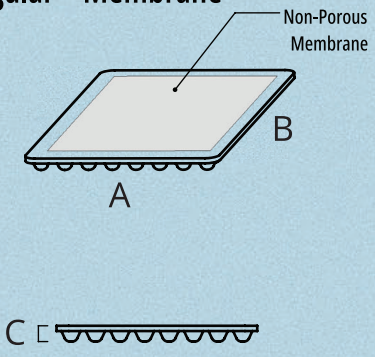
The Flex Sheet is designed for small to medium sized cranial defects and deformities.

It has a smooth exterior surface and a series of pedicles on the interior surface that are designed to provide volume and flexibility. The Flex Sheet is available with and without a membrane layer, allowing the surgeon to selectively prevent tissue ingrowth, if desired.

Regular



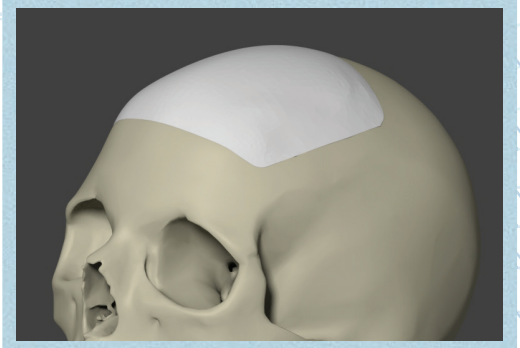
Regular + Membrane



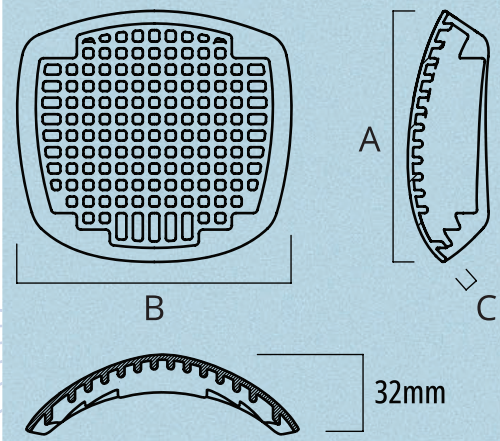
SU-POR Flex Sheet

CAT#	DESCRIPTION	A	B	C
4109	Regular	56	91	4.5
4134	Regular + Membrane	56	91	4.5

CRANIAL FLEX GRID



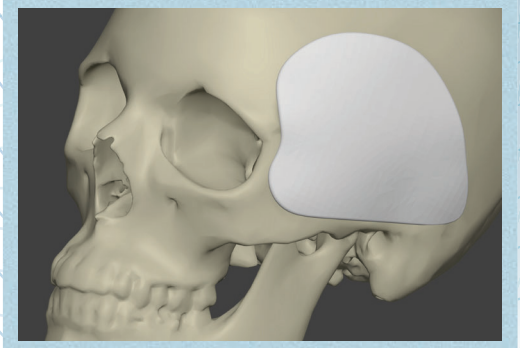
The Cranial Flex Grid is designed to address full-thickness cranial defects as an alternative to calvarial bone grafts. The design provides strength and flexibility, and allows for the implant to be cut to the desired shape at the time of surgery.



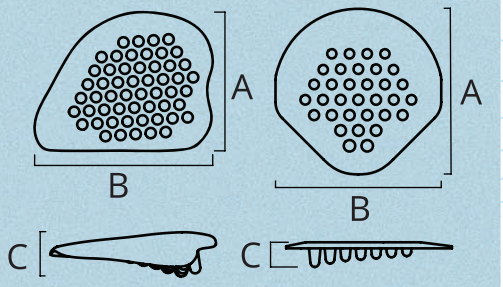
SU-POR Cranial Flex Grid

CAT#	A	B	C
4108	97	106	6

TEMPORAL FLEX GRID



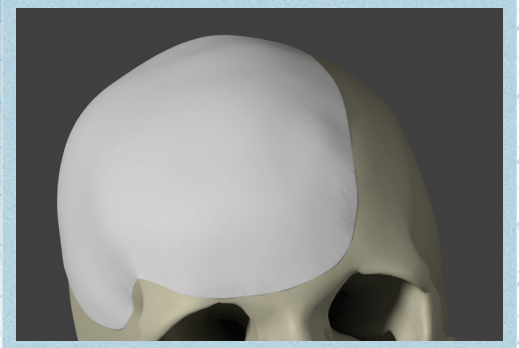
The Temporal Flex Grid is designed to augment deficient soft tissue in the temporal region. The Temporal Flex Grid has a thin, contoured temporal surface designed to provide proper anatomical fit and a more natural result.



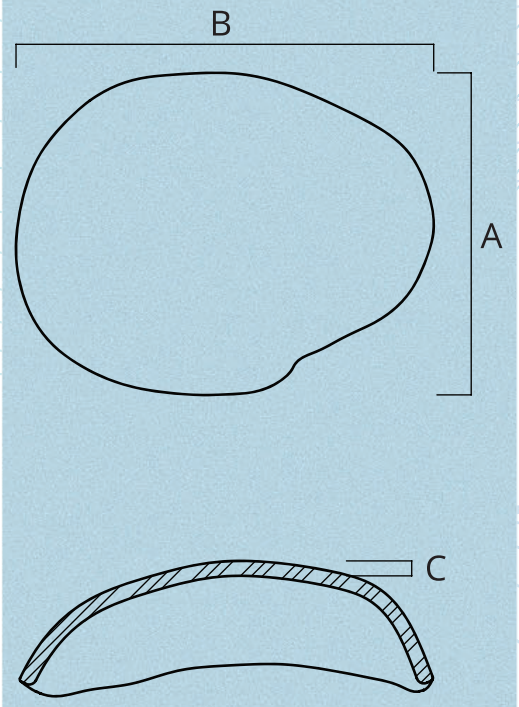
SU-POR Temporal Flex Grid

CAT#	DESCRIPTION	A	B	C
4110	Small - Left	61	78	18
4111	Small - Right	61	78	18
4112	Medium - Left	74	93	20
4113	Medium - Right	74	93	20
4114	Large - Left	82	105	20
4115	Large - Right	82	105	20
4363	SP - Small	70	70	10
4364	SP - Medium	88	86	15
4365	SP - Large	98	95	18

CRANIAL HEMISPHERE



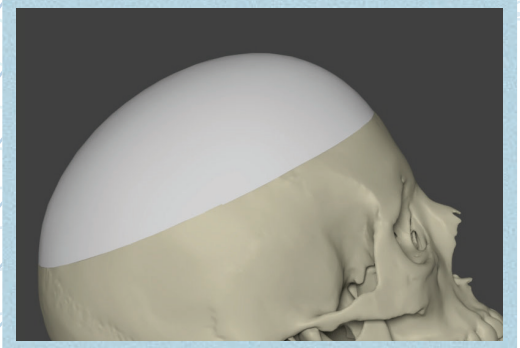
The Cranial Hemisphere is designed to provide surgeons with a reconstructive option for large cranial defects. The Cranial Hemisphere provides alternatives to customized implants, grafts, and other implant materials.



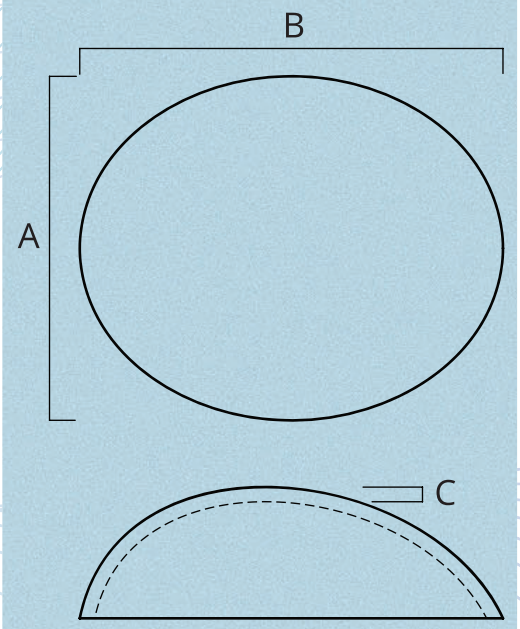
SU-POR Cranial Hemisphere

CAT#	DESCRIPTION	A	B	C
4116	Left	124	170	4.5
4117	Right	124	170	4.5
4118	Left	124	170	6
4119	Right	124	170	6

CRANIAL DOME



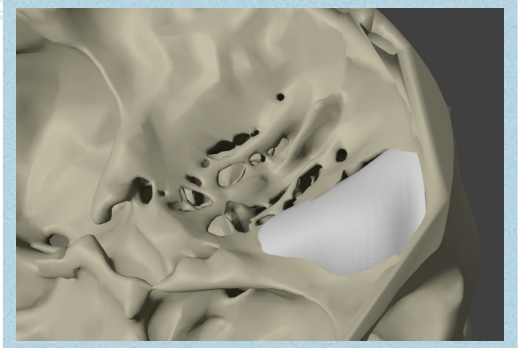
The Cranial Dome is designed to provide surgeons with a reconstructive option for large cranial defects. The Cranial Dome approximates the contour of the superior 1/3 of the cranium and is available in 4mm and 6mm thickness.



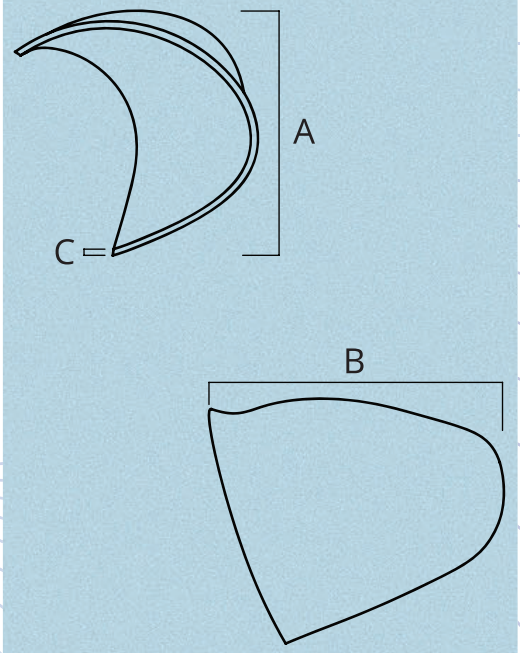
SU-POR Cranial Dome

CAT#	DESCRIPTION	A	B	C
4120	Regular	150	180	4
4121	Large	150	180	6

ORBITO-ZYGOMATIC



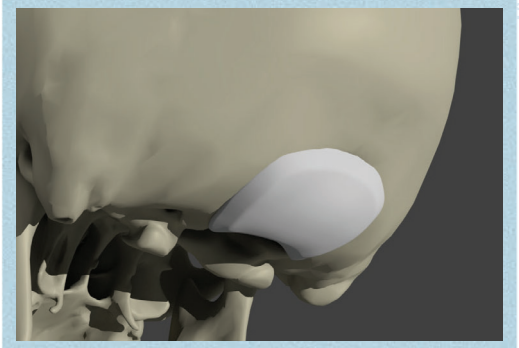
The Orbito-Zygomatic is designed for reconstruction of the superior and lateral surfaces of the orbital roof removed during cranial procedures.



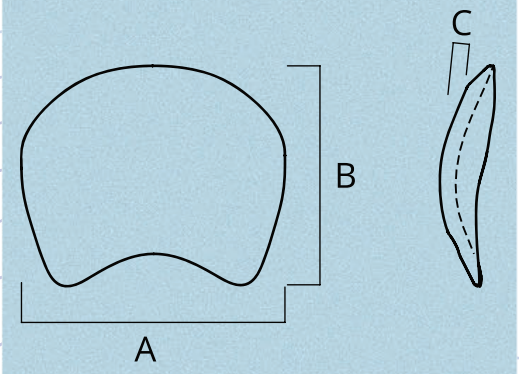
SU-POR Orbito-Zygomatic

CAT#	DESCRIPTION	A	B	C
4072	Left	33	38	0.8
4073	Right	33	38	0.8

CAPOCELLI PLATE



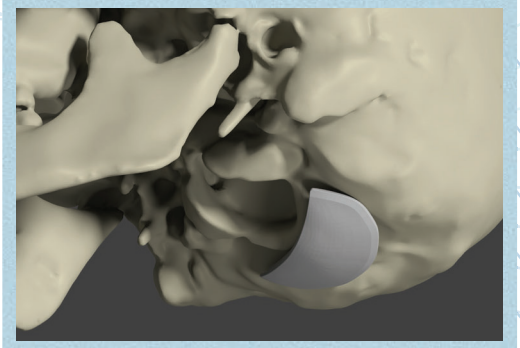
The Capocelli Plate restores the cranium while maintaining decompression following suboccipital decompressive procedures. It is designed to bridge over the decompression rather than replace the removed bone. Screws or sutures can be placed in any desired location.



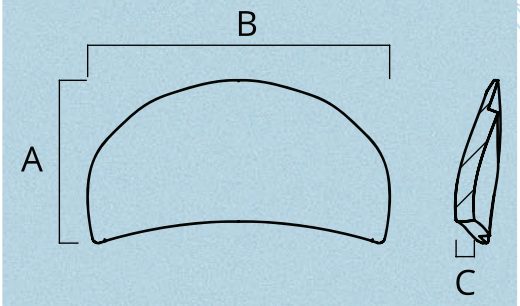
SU-POR Capocelli Plate

CAT#	DESCRIPTION	A	B	C
4461	Small	43	36	3
4462	Medium	48	40	3
4463	Large	54	45	3

SPECIAL CAPOCELLI PLATE



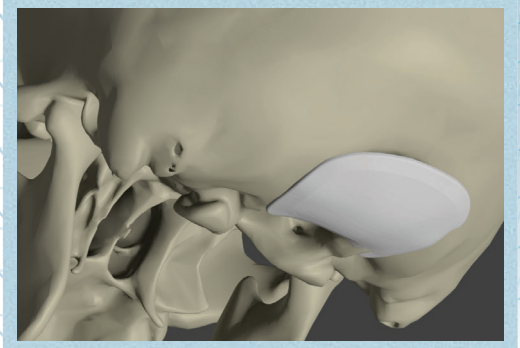
The Special Capocelli Plate restores the cranium while maintaining decompression following suboccipital decompressive procedures. It is designed to be trimmed to meet the needs of the individual patient and overlap the defect. It includes a flange and a cut guide for consistent results.



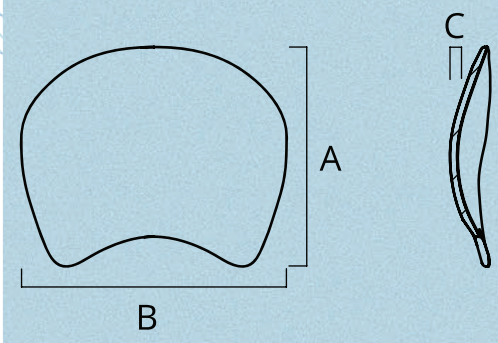
SU-POR Special Capocelli Plate

CAT#	DESCRIPTION	A	B	C
4465	Medium	27	50	3

POSTERIOR FOSSA PLATE



The Posterior Fossa Plate is designed to restore the cranium following posterior fossa craniotomies by providing closure. The thin design of the implant allows for easier closure of the soft tissue and galea while the nonporous membrane layer on the dura-side reduces the potential for dural adhesion.



SU-POR Posterior Fossa Plate

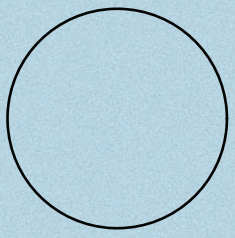
CAT#	DESCRIPTION	A	B	C
4459	Medium	40	47	1.6
4460	Large	45	55	1.6
4471	Extra Large	54	66	1.6

ORBITAL

SPHERE

The Su-Por Sphere provides surgeons with an excellent fully porous option for enucleation and evisceration procedures. The Sphere is available in multiple sizes to ensure the best possible fit.

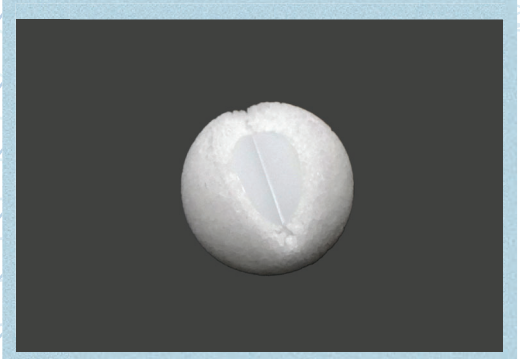
Wrapping of the Sphere implant is optional, as extraocular muscles may be sutured directly to the implant. Each A disposable enucleation introducer is packaged with each implant.



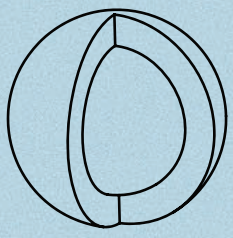
SU-POR Sphere

CAT#	DIAMETER
4028	14
4029	16
4030	18
4031	19
4032	20
4033	21
4034	22
4035	23

COR-TEC™ SPHERE



The Cor-Tec Sphere restores volume following enucleation or evisceration procedures. A porous, integrating shell surrounds the solid sphere, reducing the potential for implant migration. The solid core eliminates the potential for a ceter-space void of fibrovascular ingrowth. Muscles can be sutured directly to the smooth outer surface of the implant, eliminating the need for implant wrapping materials.

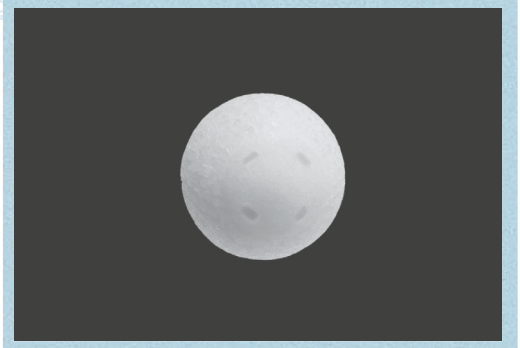


Shown in cut section for clarity

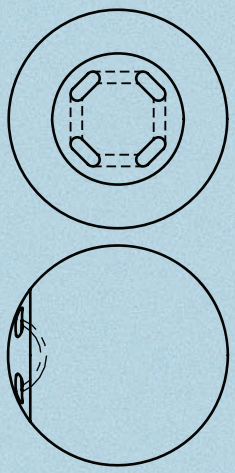
SU-POR Cor-Tec™ Sphere

CAT#	DIAMETER
4042	16
4043	18
4045	20
4047	22

QUADRO-PORT TUNNEL ORBITAL SPHERE



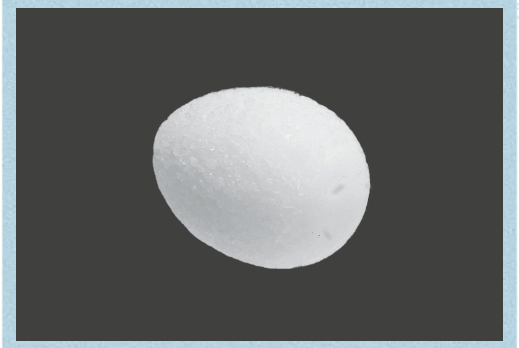
The Quadro-Port Tunnel Orbital Sphere is an ocular implant with a smooth anterior surface and prefabricated tunnels for sutures to pass through when attaching extraocular muscles directly to the implant without the need for a wrapping material.



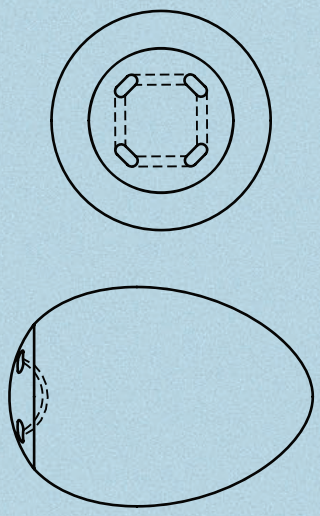
SU-POR Quadro-Port Tunnel Orbital Sphere

CAT#	DIAMETER
4036	16
4037	18
4039	20
4041	22

QUADRO-PORT TUNNEL CONICAL ORBITAL



The Quadro-Port Tunnel Conical Orbital Implant (COI) is a conical shaped ocular implant with a smooth anterior surface and prefabricated tunnels for sutures to pass through when attaching extraocular muscles. The conical shape provides more volume posteriorly; approximately equivalent to the volume of a sphere with 2mm larger diameter. A disposable enucleation introducer is packaged with each implant.

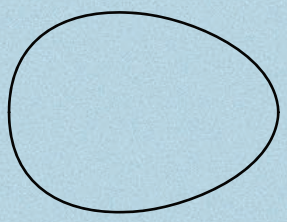


SU-POR Quadro-Port Tunnel Conical Orbital Implant

CAT#	DESCRIPTION	DIAMETER
4059	3.0mL Volume	16
4060	4.2mL Volume	18
4062	5.6mL Volume	20
4063	7.4mL Volume	22

CONICAL ORBITAL IMPLANT

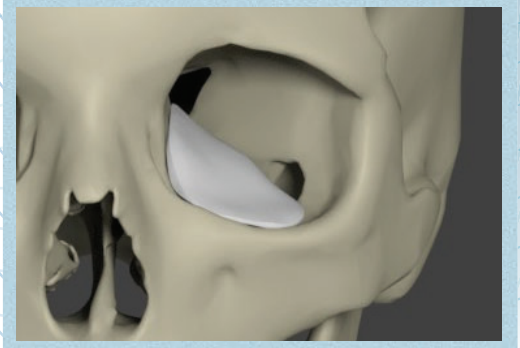
The Conical Orbital Implant (COI) provides an excellent option for enucleation and evisceration procedures where more volume is required. The conical shape provides more volume posteriorly; approximately equivalent to the volume of a sphere with 2mm larger diameter. A disposable enucleation introducer is packaged with each implant.



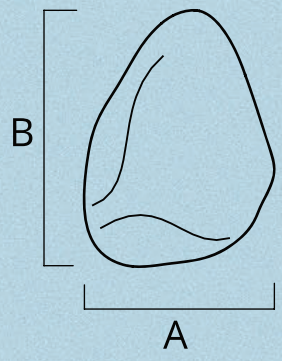
SU-POR Conical Orbital Implant

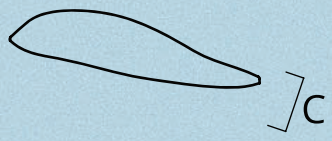
CAT#	DESCRIPTION	DIAMETER
4054	3.0mL Volume	16
4055	4.2mL Volume	18
4057	5.6mL Volume	20
4058	7.4mL Volume	22

ENOPHTHALMOS WEDGE



The Enophthalmos Wedge is designed to mimic the shape of the orbital floor and provides volume to the orbit.

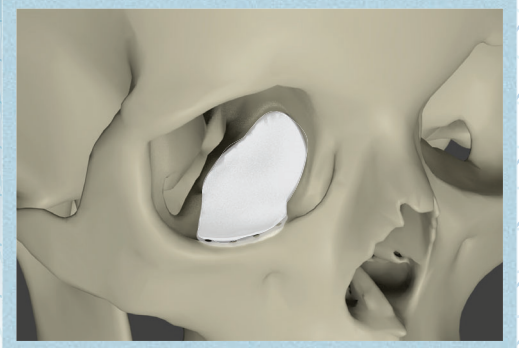




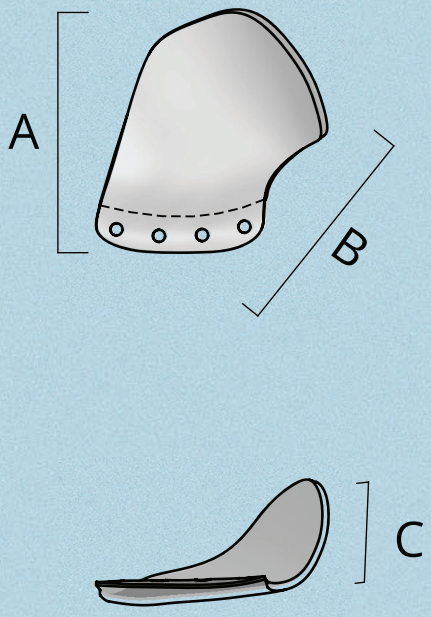
SU-POR Enophthalmos Wedge

CAT#	DESCRIPTION	A	B	C
4180	Regular - Left	24	33.5	7
4181	Regular - Right	24	33.5	7
4182	Large - Left	28	40	7.5
4183	Large - Right	28	40	7.5

3D ORBITAL FLOOR



The 3D Orbital Floor is an off-the-shelf anatomic design based on CT data for medium to large orbital floor fractures. The structure is comprised of porous bone side to prevent migration and a nonporous layer that are heat bonded together to provide support while extending over the orbital rim for a smooth transition to bone. The eyelets accommodate 1.0mm or 1.5mm self-drilling screws. When contouring, the implant bends and holds the desired shape without the heating.

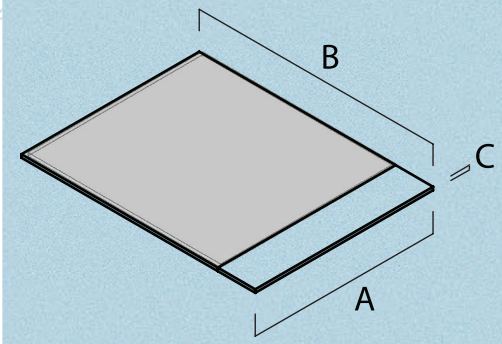


SU-POR 3D Orbital Floor

CAT#	DESCRIPTION	A	B	C
4452	Small - Right	30	35	13
4453	Small - Left	30	35	13
4456	Large - Right	34	37.5	16
4457	Large - Left	34	37.5	16

FLOR-TEC™ COMPOSITE ORBITAL FLOOR

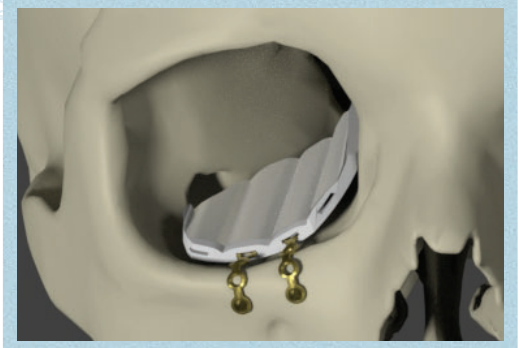
The Su-Por Flor-Tec™ Composite Orbital Floor is a composite structure of Su-Por biomaterial. It is comprised of a nonporous sheet and a leading porous strip. Nonporous high-density polyethylene acts to prevent tissue ingrowth while the porous strip may help to facilitate implant attachment and stabilization.



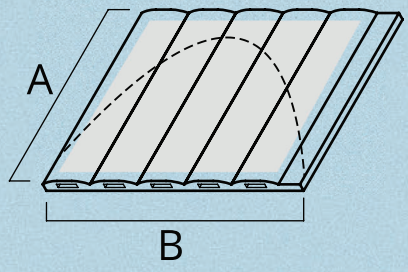
SU-POR Flor-Tec™ Composite Orbital Floor

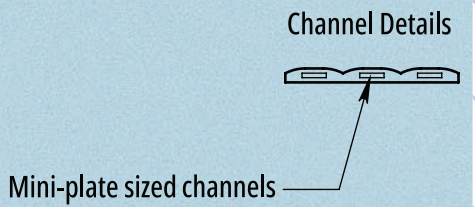
CAT#	A	B	C
4233	38	50	0.3
4232	38	50	0.4
4234	38	50	0.5

MINIPLATE CHANNEL SHEET



The Membrane Miniplate Channel Sheet and the Miniplate Channel Sheet are designed for repair of significant orbital floor and wall trauma where the addition of a rigid fixation plate provides structural support. The membrane layer acts to inhibit tissue ingrowth.





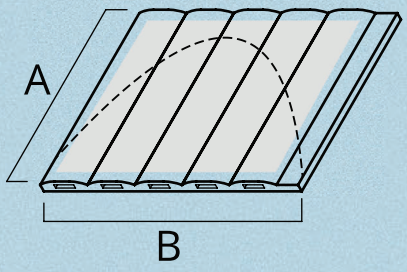
SU-POR Miniplate Channel Sheet

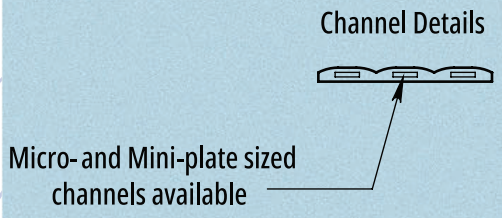
CAT#	DESCRIPTION	A	B
4298	Regular	40	52
4300	Membrane	40	52

 Illustrations are not actual size. Please consult dimensional descriptions. All dimensions are in mm.

MICROPLATE CHANNEL SHEET

The Membrane Microplate Channel Sheet and the Microplate Channel Sheet are designed for repair of significant orbital floor and wall trauma where the addition of a rigid fixation plate provides structural support. The membrane layer acts to inhibit tissue ingrowth.

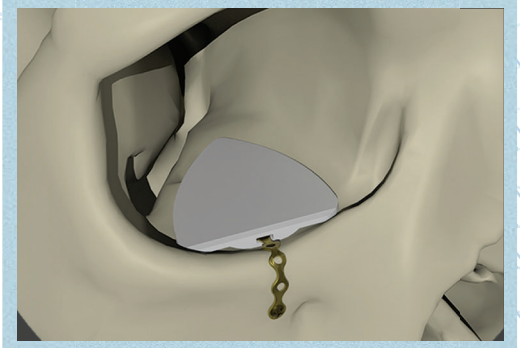




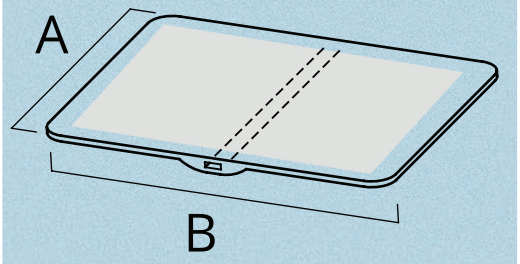
SU-POR Microplate Channel Sheet

CAT#	DESCRIPTION	A	B
4299	Regular	40	52
4301	Membrane	40	52

SINGLE CHANNEL SHEET



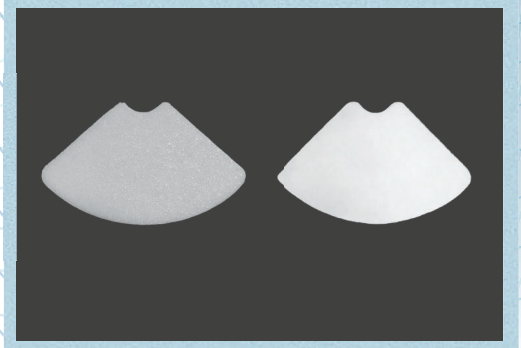
The Single Channel Sheet is for significant orbital floor and wall trauma. The addition of a single rigid fixation plate provides increased structural support. The internal channel accepts microplates from conventional plating systems, facilitating fixation to bone. It is available with optional heat bonded nonporous membrane layer.



SU-POR Single Channel Sheet

CAT#	DESCRIPTION	A	B
4297	Regular	38	50
4296	Membrane	38	50

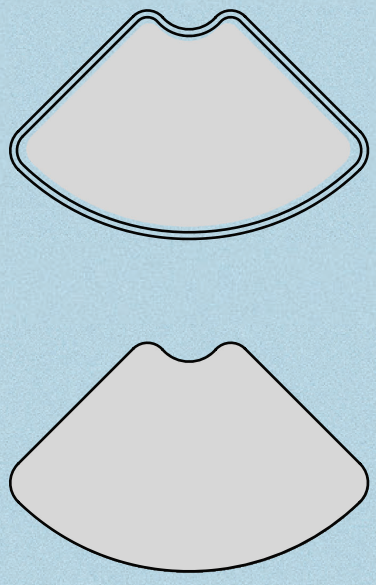
FAN PLATE



The Su-Por Fan Plate is designed for medium to large orbital floor defects. The smooth template allows for modification of the implant to fit the desired location and introduce the porous implant without damaging the soft tissue.

1. Shape the template and rinse clean.
2. Transfer the shape and contour to the implant.
3. Use the template as an introducer for implant.

The implant is available with or without nonporous membrane layer and can be fixated with screws or sutures.

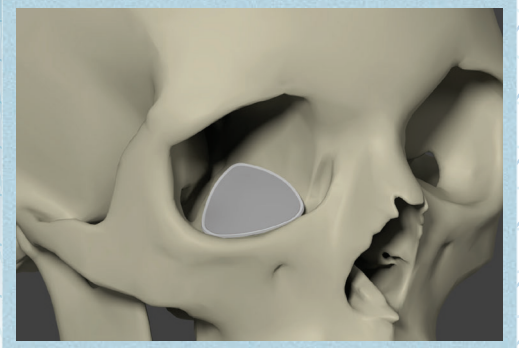


Template Included

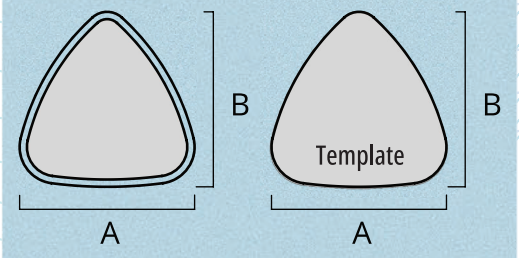
SU-POR Fan Plate

CAT#	DESCRIPTION	Thickness
4487	40mm Radius w Template	0.85
4488	40mm Radius w Template	1.5
4489	Membrane - 40mm Radius w Template	1.0

ORBITAL FLOOR PLATE



Designed for small to medium orbital floor defects. The smooth template allows for modification of the implant to fit the desired location and introduce the porous implant without damaging the soft tissue. The implant is available with or without a nonporous membrane layer and can be fixated with screws or sutures.

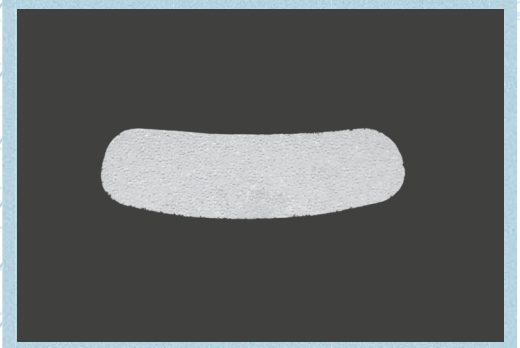


C = Thickness

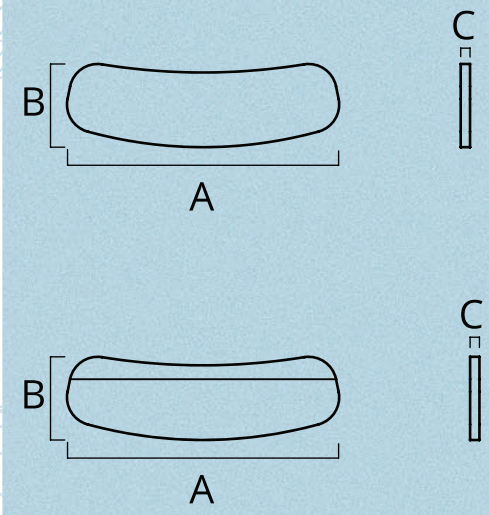
SU-POR Orbital Floor Plate

CAT#	DESCRIPTION	A	B	C
4478	Small w Template	24	24	0.85
4479	Medium w Template	30	30	0.85
4480	Large w Template	35	35	0.85
4481	Small w Template	24	24	1.5
4482	Medium w Template	30	30	1.5
4483	Large w Template	35	35	1.5
4484	Small Membrane w Template	24	24	1.0
4485	Medium Membrane w Template	30	30	1.0
4486	Large Membrane w Template	35	35	1.0

LOWER EYELID IMPLANT



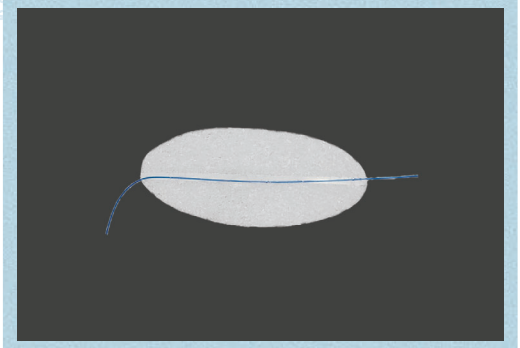
The Lower Eyelid Implant is an excellent addition for the management of patients with symptomatic paralytic ectropion. The thin, tissue-like profile aids in greater eyelid stability. The Lower Eyelid Implant is fully porous to promote tissue ingrowth and facilitate implant stabilization. The implant is placed in the middle lamellar space inferior to the tarsus and under no tension. It is also available with a strip to provide additional support.



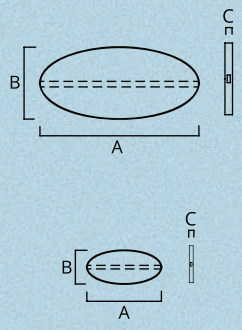
SU-POR Lower Eyelid Implant

CAT#	DESCRIPTION	A	B	C
4436	Regular	29.5	9	0.45
4437	Regular + Superior Strip	29.5	9	0.45

AIRO™ IMPLANT



The AIRO implant is a composite microchannel-suture implant that provides a minimally invasive option to lift and fill the eyebrow ROOF fat with a porous scaffold. The implant becomes bio-integrated while avoiding cheese-wiring through soft tissue, providing long-term lasting results.

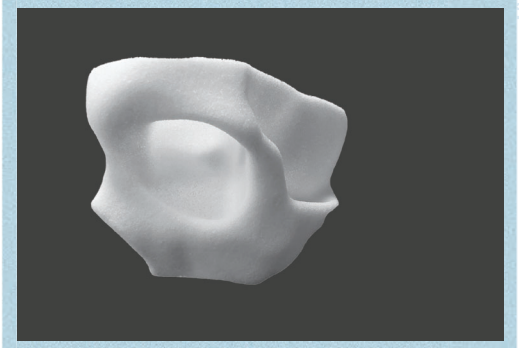


SU-POR AIRO™ Implant

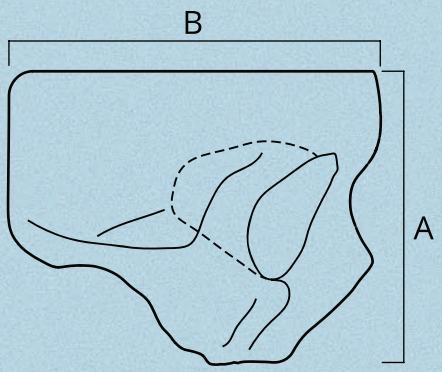
CAT#	DESCRIPTION	A	B	C
4442	Small - Qty 1	10	5	0.45
4443	Large - Qty 1	21	9.5	0.45
4444	Small - Qty 2	10	5	0.45
4445	Large - Qty 2	21	9.5	0.45

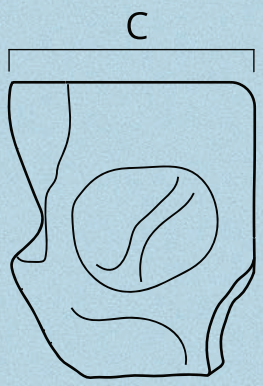
 Illustrations are not actual size. Please consult dimensional descriptions. All dimensions are in mm.

COMPLETE ORBIT



The Complete Orbit is designed to restore bony structures of the orbit. The Complete Orbit may be modified to meet the structural and anatomic needs of the patient for a large variety of defects.

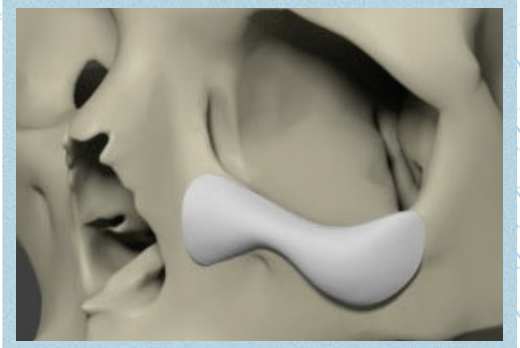




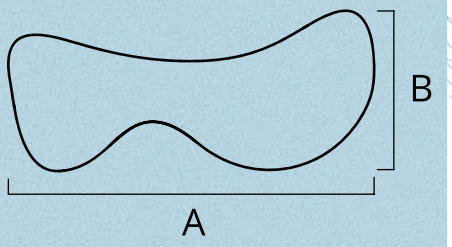
SU-POR Complete Orbit

CAT#	DESCRIPTION	A	B	C
4226	Left	77	97	63
4227	Right	77	97	63

INFERIOR ORBITAL RIM



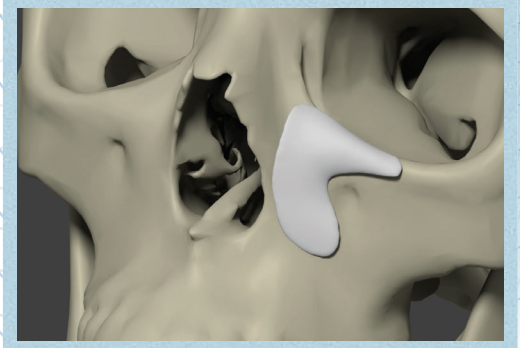
The Inferior Orbital Rim provides anterior projection and is designed to be trimmed to meet the needs of the individual patient.



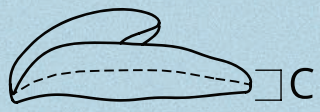
SU-POR Inferior Orbital Rim

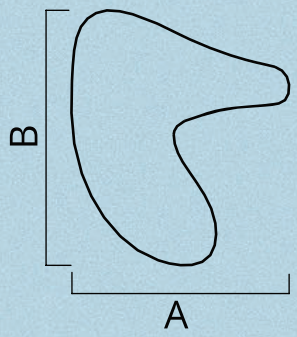
CAT#	DESCRIPTION	A	B	C
4064	Left	43	18	3.2
4065	Right	43	18	3.2

INFERIOR MEDIAL ORBITAL RIM



The Inferior Medical Orbital Rim fits over the inferior orbital rim and extends both superiorly and inferiorly medial to the inferior orbital nerve.

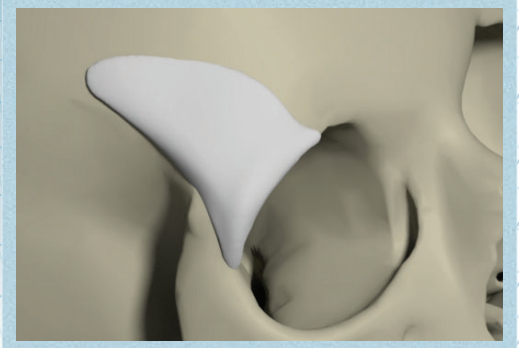




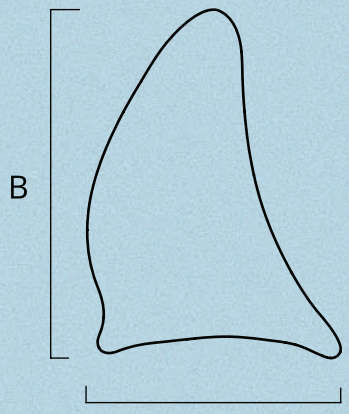
SU-POR Inferior Medial Orbital Rim

CAT#	DESCRIPTION	A	B	C
4191	Left	25	26	2.5
4192	Right	25	26	2.5

SUPERIOR LATERAL ORBITAL RIM



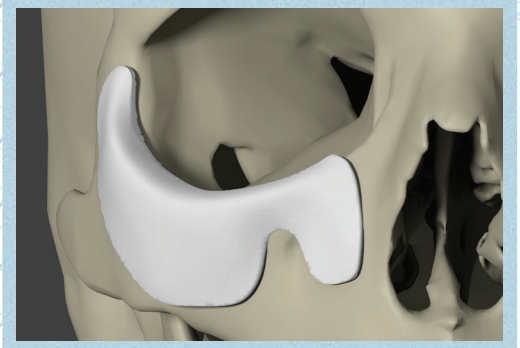
The Superior Lateral Orbital Rim is designed to augment the lateral and superior orbital rims, and is designed to be trimmed to meet the needs of the individual patient.



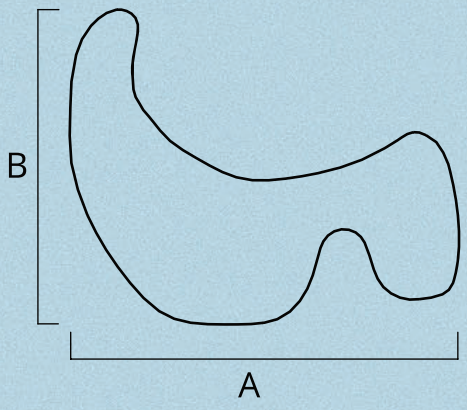
SU-POR Superior Lateral Orbital Rim

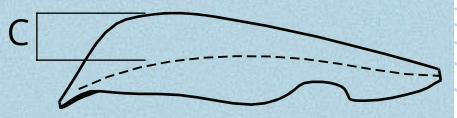
CAT#	DESCRIPTION	A	B	C
4251	Left	33	45	4
4252	Right	33	45	4

EXTENDED ORBITAL RIM



The Extended Orbital Rim provides surgeons with a large amount of implant to work with, allowing for trimming as required, to fit a large array of orbital rim defects.

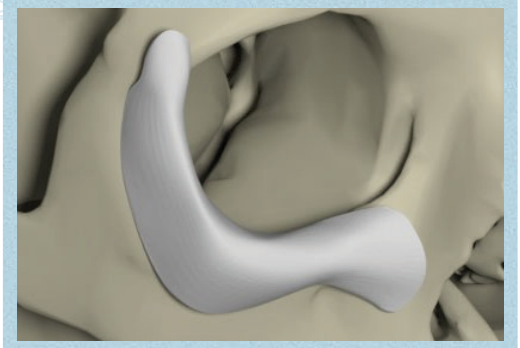




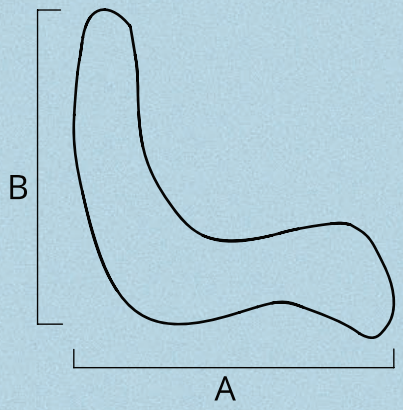
SU-POR Extended Orbital Rim

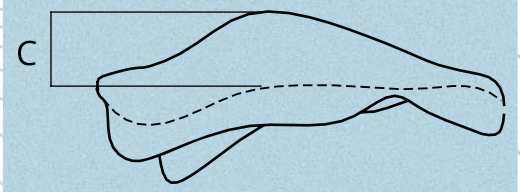
CAT#	DESCRIPTION	A	B	C
4066	Left	47	40	6.33
4067	Right	47	40	6.33

ORBITAL RIM ONLAY



The Orbital Rim Onlay is designed to augment the lateral and inferior orbital rims and subtly increase the anterior projection.





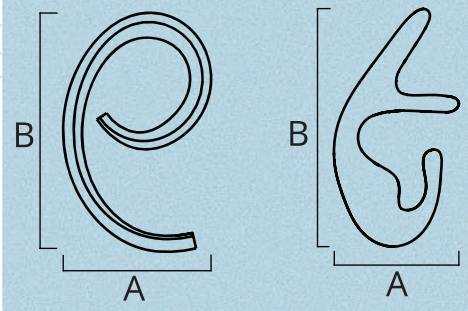
SU-POR Orbital Rim Onlay

CAT#	DESCRIPTION	A	B	C
4253	Left	40	40	8.45
4254	Right	40	40	8.45

FACIAL

TWO-PIECE AURICULAR IMPLANT

The design of the Su-Por Auricular implants allows for surgeons to custom shape the height and projection of the helical rim to match the contralateral ear of the patient. The porous material provides a structural base for a temporal parietal fascia flap and skin grafts. The success of the implant depends on the technique of the surgeon; the porous structure requires a vascular tissue flap, such as a temporal parietal fascia flap and skin graft, to prevent late exposure of the implant.

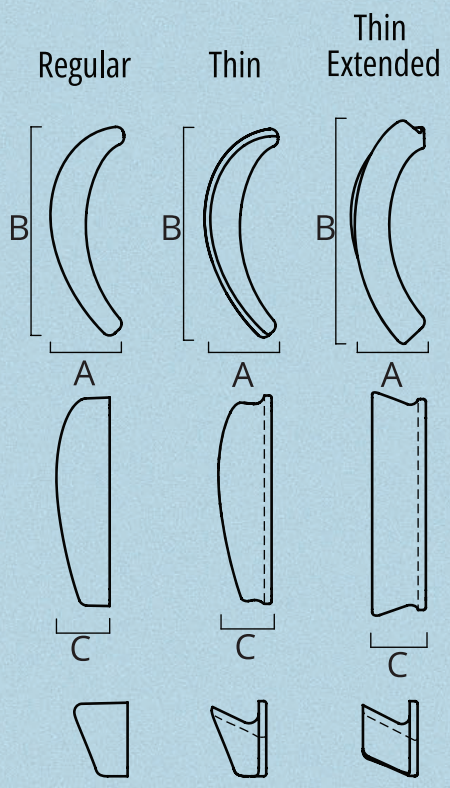


SU-POR Two-Piece Auricular

CAT#	DESCRIPTION	A	B
4099	Ear Base - Left	32	63
4100	Ear Base - Right	32	63
4101	Helical - Left	39	63
4102	Helical - Right	39	63

EAR WEDGE

The Ear Wedge is designed to enhance the projection of a surgically reconstructed ear. The Ear Wedge can be trimmed to match the projection of the contralateral ear.

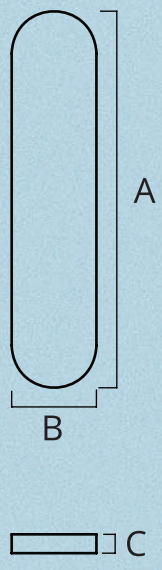


SU-POR Ear Wedge

CAT#	DESCRIPTION	A	B	C
4292	Right	15	44	11
4293	Left	15	44	11
4294	Thin - Left	15	44	11
4295	Thin - Right	15	44	11
4285	Extended Thin - Left	15	44	11
4286	Extended Thin - Right	15	44	11
4287	Extended Thin Lg - Left	15	53	11
4288	Extended Thin Lg - Right	15	53	11

NASAL SHEET

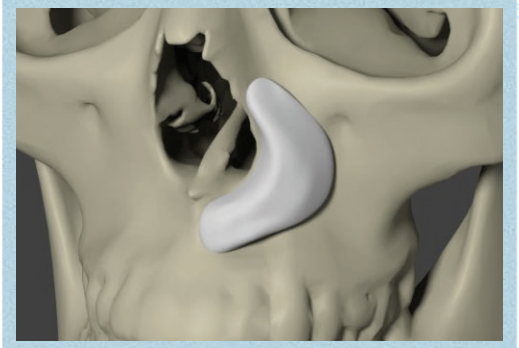
The Nasal Sheet provides surgeons with a solution for when nasal tip projection is required. The Nasal Sheet can be used to support the tip by implantation between the medial crura of the alar cartilage.



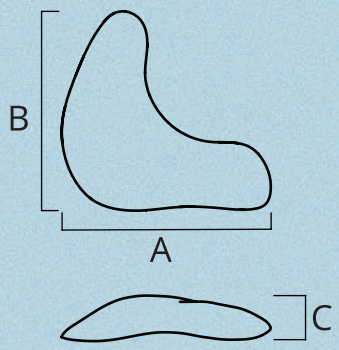
SU-POR Nasal Sheet

CAT#	A	B	C
4107	40	9	1.1

PARANASAL



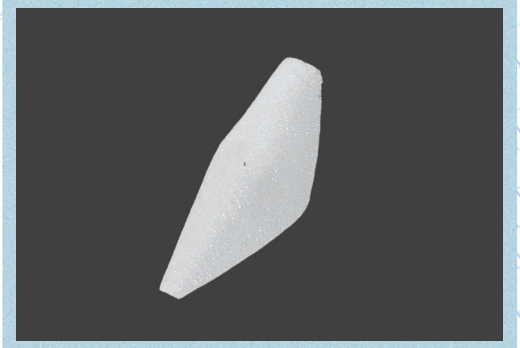
The paranasal implant is designed for augmentation and restoration of the midface in patients who have midfacial deficiency, improving facial harmony and balance.



SU-POR Paranasal

CAT#	DESCRIPTION	A	B	C
4156	Small - Left	28	26	4.5
4157	Small - Right	28	26	4.5
4158	Large - Left	30	28	7
4159	Large - Right	30	28	7

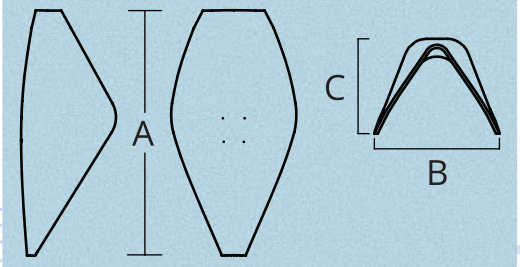
NASAL DORSAL SHELL



The Nasal Dorsal Shell provides surgeons with an excellent option for augmenting or correcting deformities of the nose.

It is designed to be thin and flexible, providing a versatile option for plastic and reconstructive surgery. The implant can be sutured directly to the upper lateral cartilage on each side of the nose, or any other desired location.

Each Nasal Dorsal Shell is packaged with a non-porous, smooth template for aiding in the shaping and placement of the implant.



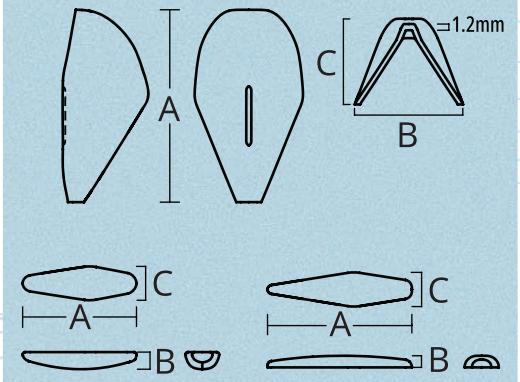
SU-POR Nasal Dorsal Shell

CAT#	A	B	C
4103	43	22	16

NASAL SHELL

The Nasal Shell is an excellent reconstruction option for correcting nasal deformities. The implant mimics the shape of the nasal bones and upper lateral cartilage. Nasal Shell inserts can be used in dorsal areas where additional augmentation is required. The implant can be sutured directly to the upper lateral cartilage on each side of the nose, or any other desired location.

Each Nasal Dorsal Shell is packaged with a non-porous, smooth template for aiding in the shaping and placement of the implant.



SU-POR Nasal Shell

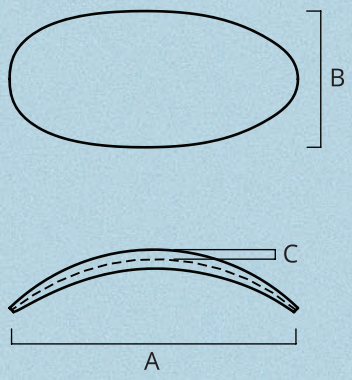
CAT#	DESCRIPTION	A	B	C
4368	Regular	38	21	17
	Insert - Small (Included)	30	4	9
	Insert - Large (Included)	38	2.5	9
4369	Large	40	20	18
	Insert - Small (Included)	32	4	9
	Insert - Large (Included)	41	3.1	9

NASAL BATTEN

The Nasal Batten is designed for nasal reconstruction procedures involving the external nasal valve and alar cartilage.

The implant shape is elongated and concave to fit and support the external nasal valve structure.

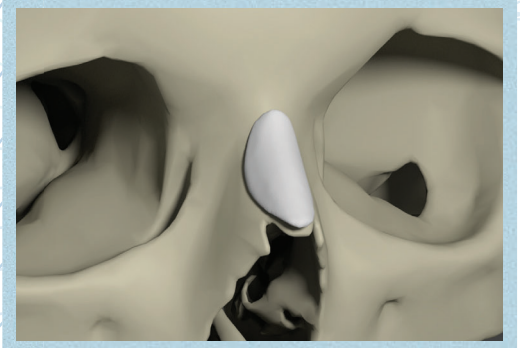
Two implants are provided per package.



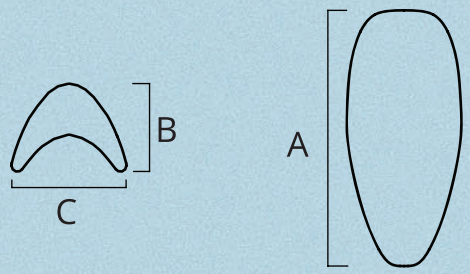
SU-POR Nasal Batten

CAT#	A	B	C
4240	25	12.5	0.6

NASAL RADIX



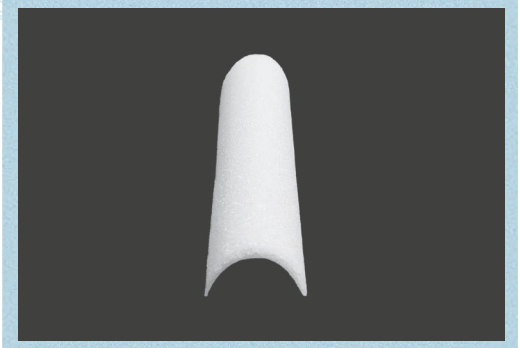
The Nasal Radix offers surgeons an excellent option to augment a low nasal radix.



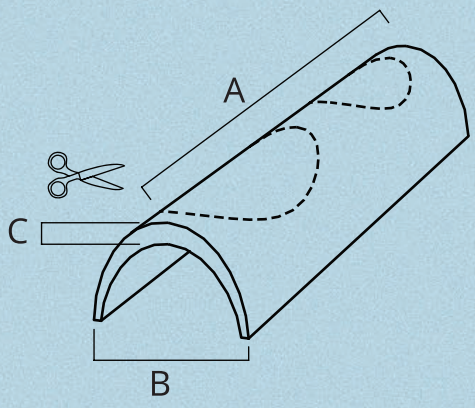
SU-POR Nasal Radix

CAT#	A	B	C
4243	24	3	10

NASAL ARCH



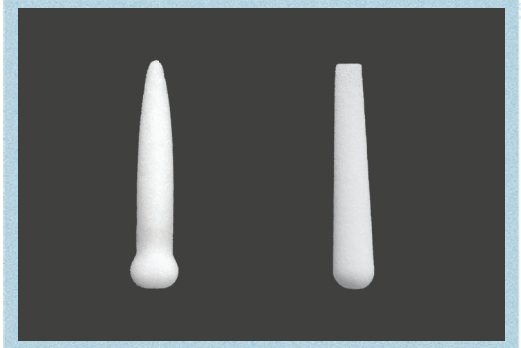
The Nasal Arch can be used effectively to create a nasal onlay where subtle augmentation of the dorsum is required, providing the desired projections and contour to the bridge of the nose. Care should be taken to place the Nasal Arch appropriately in the dorsum area and to avoid extending the Nasal Arch proximally into the soft nasal cartilage area of the tip. The edge of the Nasal Arch should be feathered to promote a smooth transition from the implant to the patient's natural contour.



SU-POR Nasal Arch

CAT#	DESCRIPTION	A	B	C
4244	Small	70	13	2
4245	Medium	70	15	2
4246	Large	70	17	2

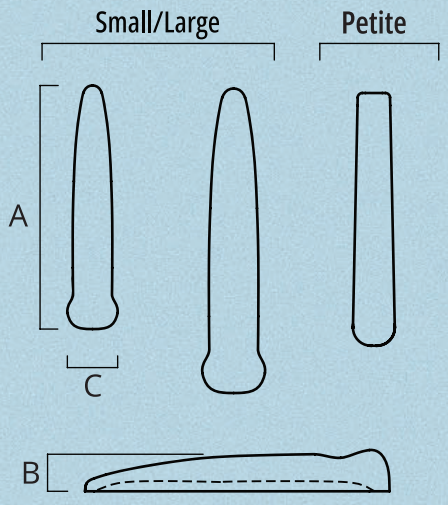
NASAL DORSUM



The Nasal Dorsum is designed to provide subtle augmentation to the dorsum.The implants should be trimmed, as needed, to fit the needs of the patient.

The Petite Nasal Dorsum is designed with a tapered profile to provide a gradual and natural transition to the augmented area.

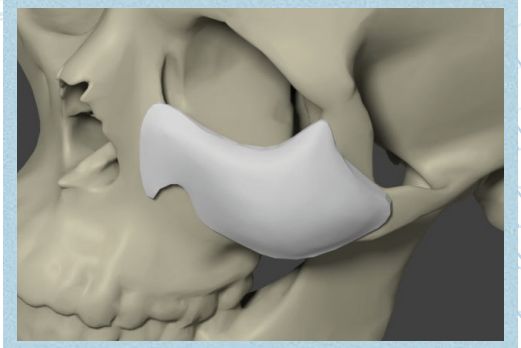
Each Petite Nasal Dorsum I is packaged with a non-porous, smooth template for aiding in the shaping and sizing of the implant.



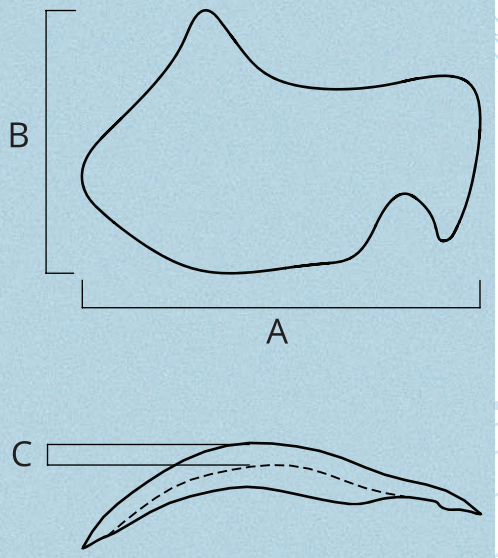
SU-POR Nasal Dorsum

CAT#	DESCRIPTION	A	B	C
4104	Regular	55	6	9
4319	Design A - Small	54	6	11
4320	Design A - Large	67	9	14
4239	Small	54	6	11
4238	Large	67	9	14
4313	Petite	45	4	4
4314	Petite	55	4	4
4315	Petite	45	5	5
4316	Petite	55	5	5
4317	Petite	55	6	9

MIDFACE CONTOUR



The Midface Contour provides surgeons with a large area of implant to be trimmed to meet the needs of the individual patient

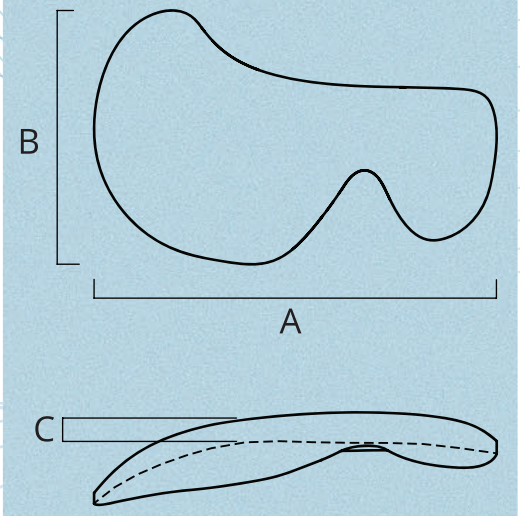


SU-POR Midface Contour

CAT#	DESCRIPTION	A	B	C
4255	Left	60	40	4
4256	Right	60	40	4

MIDFACE RIM

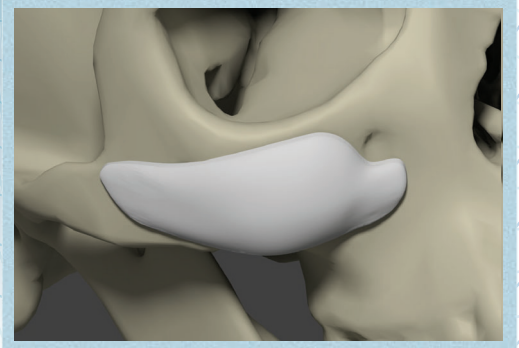
The Midface Rim is designed to augment and repair bony structures of the midface, infrerior orbital rim, and malar regions. The implant may be used in its entirety or modified based on the patient's requirements and aesthetic goals.



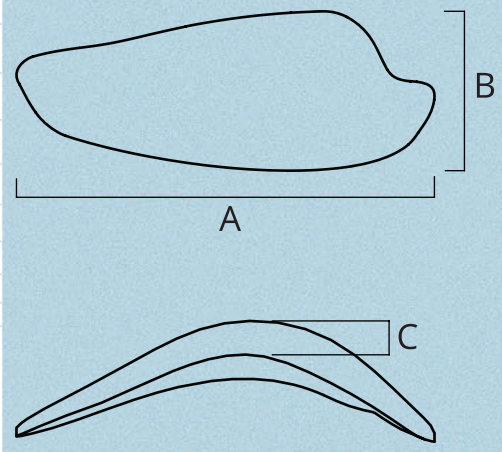
SU-POR Midface Rim

CAT#	DESCRIPTION	A	B	C
4189	Left	47	28	3
4190	Right	47	28	3

SP1 MALAR



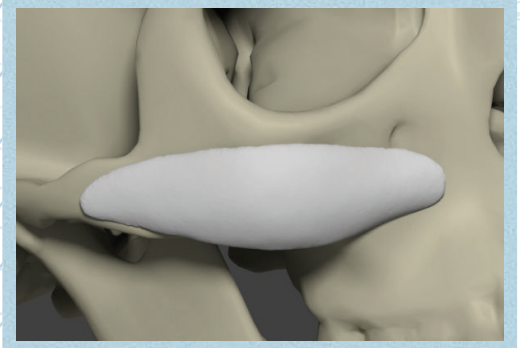
The SP1 Malar is designed to subtly augment and correct defects in the malar region, with the greatest projection in the malar prominence. The implant design accommodates the infraorbital facial nerve and tapers to the zygomatic arch.



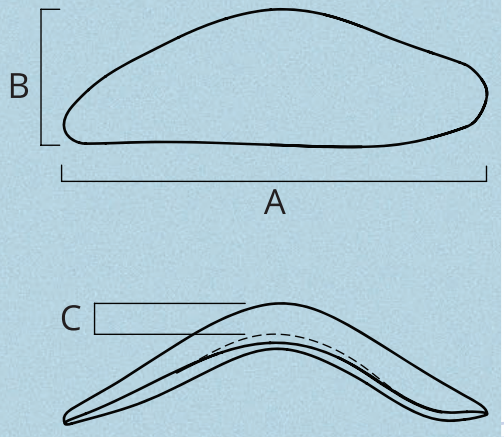
SU-POR SP1 Malar

CAT#	DESCRIPTION	A	B	C
4082	Small - Left	50	19	3
4083	Small - Right	50	19	3
4084	Regular - Left	50	19	5
4085	Regular - Right	50	19	5

SP2 MALAR



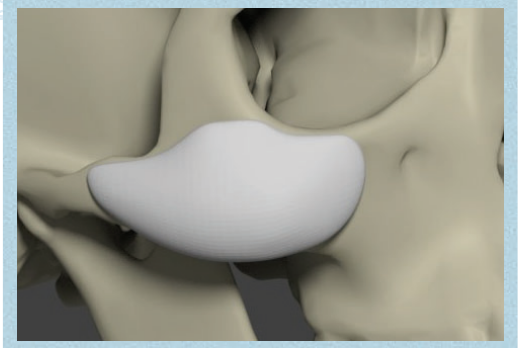
The SP2 Malar is designed to subtly augment the malar bone and follow the natural contours of the malar one, from the zygomatic arch, over the malar prominence, and down to the maxillary buttress. The implants medial edge should be positioned directly below the infraorbital nerve.



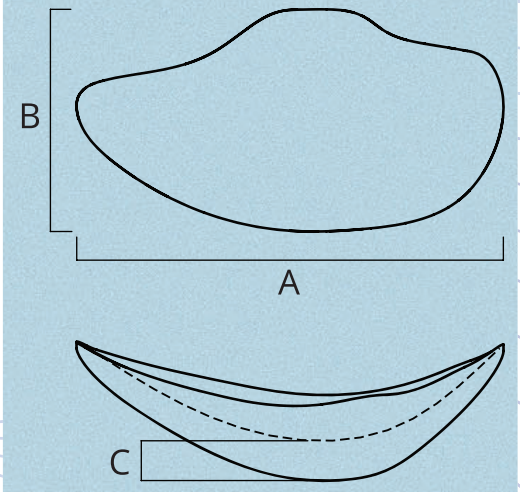
SU-POR SP2 Malar

CAT#	DESCRIPTION	A	B	C
4086	Small - Left	64	19	3
4087	Small - Right	64	19	3
4197	Medium - Left	64	19	4.5
4198	Medium - Right	64	19	4.5
4199	Large - Left	64	19	7
4200	Large - Right	64	19	7

EXTENDED MALAR



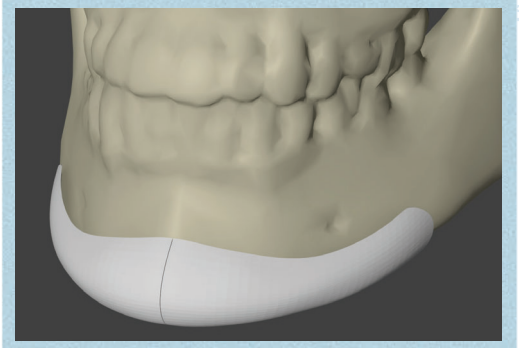
The Extended Malar is designed to add more volume to the malar or to rebuild the contour of the bone structure. The design provides a comprehensive option for malar augmentation, starting in the nasal area and extending to the zygomatic arch.



SU-POR Extended Malar

CAT#	DESCRIPTION	A	B	C
4201	Small - Left	45	24	3
4202	Small - Right	45	24	3
4203	Medium - Left	50	26	4
4204	Medium - Right	50	26	4
4205	Large - Left	55	27	5
4206	Large - Right	55	27	5

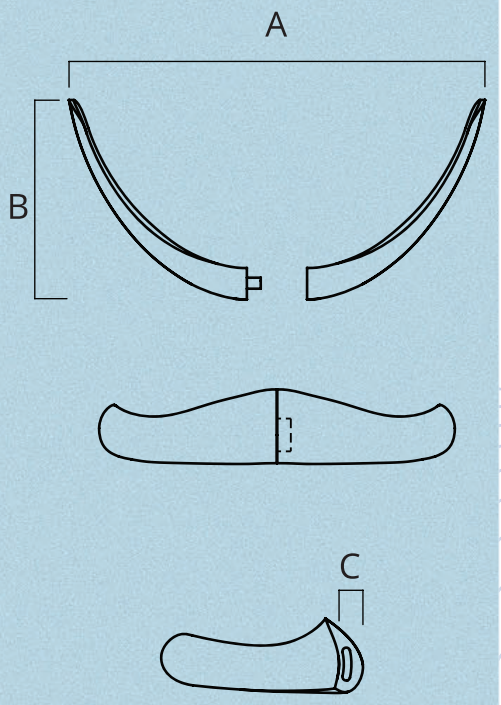
CONTOURED TWO-PIECE CHIN



The Contoured Two-Piece Chin is designed with a gradual taper and concave posterior surface to provide an excellent anatomical fit to the bony anatomy.

The implant design provides anterior projection and a natural transition laterally to the patient's bone.

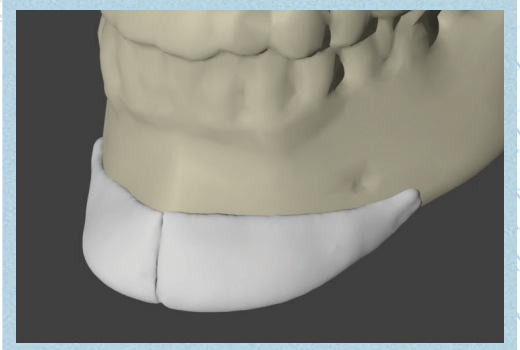
The two-piece design allows for easy insertion and joining of the implants for proper alignment



SU-POR Contoured Two-Piece Chin

CAT#	DESCRIPTION	A	B	C
4088	Small	72	42	3
4089	Medium	74	42	5
4090	Large	78	50	7
4091	Extra Large	80	55	9

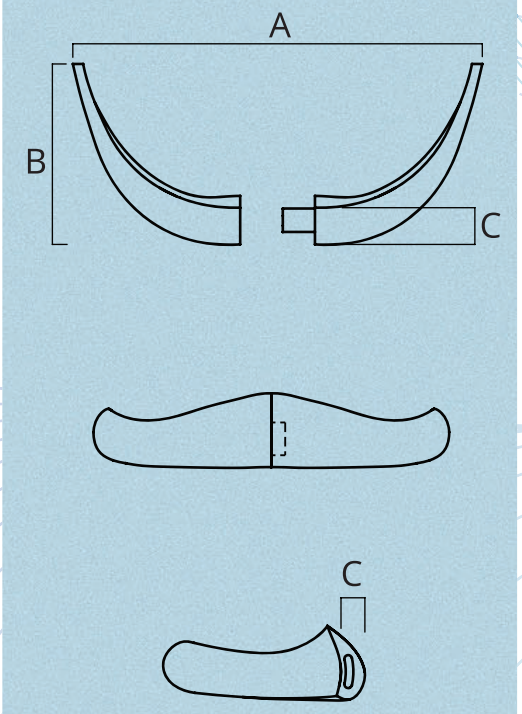
TWO-PIECE CHIN



The Two-Piece Chin is designed to allow for easy insertion and placement of the implant. The surgeon can then attach the components together for proper alignment.

The implant design provides anterior and inferior projection.

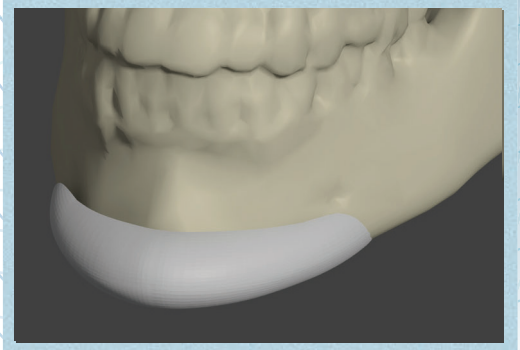
The two-piece design allows for easy insertion and joining of the implants for proper alignment



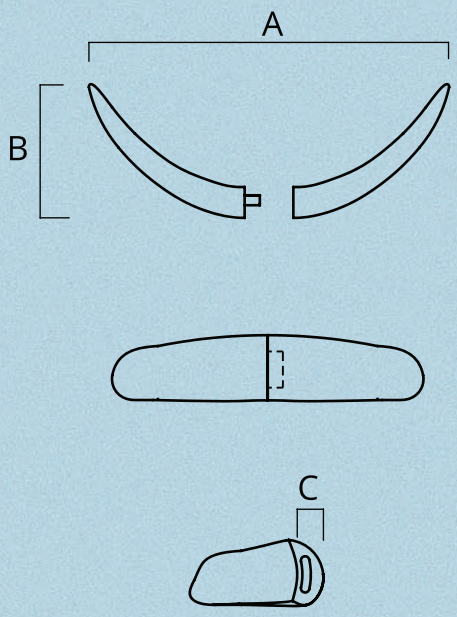
SU-POR Two-Piece Chin

CAT#	DESCRIPTION	A	B	C
4092	Small	56	33	5
4093	Medium	56	36	7
4094	Large	57	38	9

EUROPEAN CUT CHIN



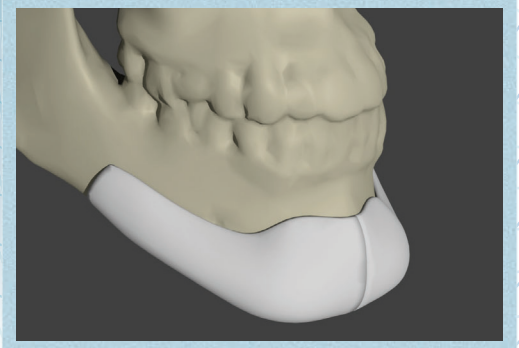
The European Cut Chin is designed to provide excellent fit to the bony anatomy and prevent augmentation that is too large. The two-piece design allows for easy fit and easy insertion and joining of the implants for proper alignment.



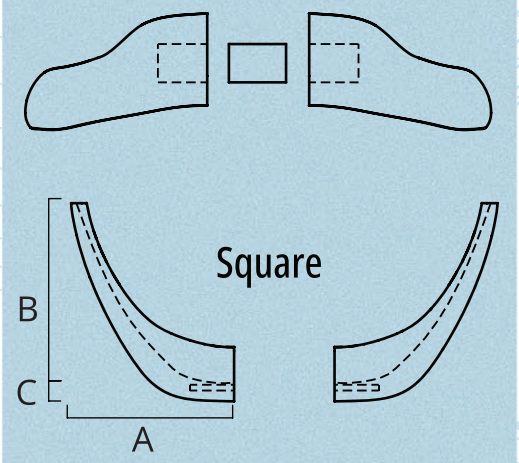
SU-POR European Cut Chin

CAT#	DESCRIPTION	A	B	C
4581	Contoured - Medium	60	26	5
4582	Small	56	21	5
4583	Medium	58	25	7

SQUARE EXTENDED CHIN



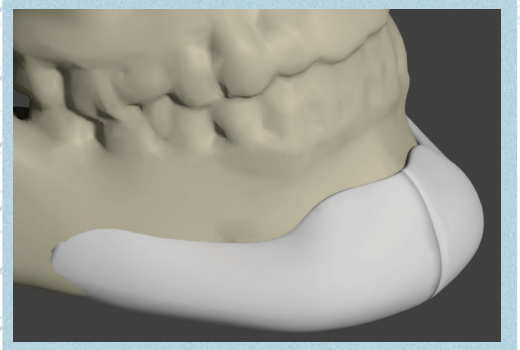
The Square Extended Chin is designed to provide tri-dimensional projection (anterior, lateral, and inferior) with a squared contour. A tab is used to join the two halves of the implant for proper alignment.



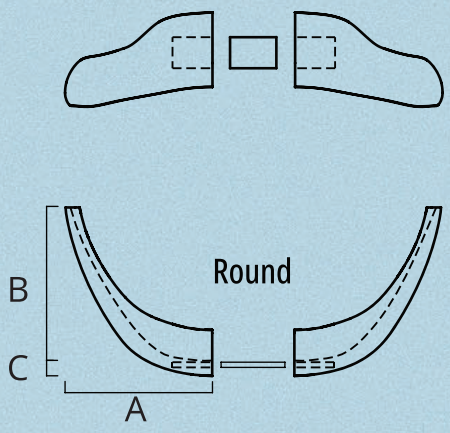
SU-POR Square Extended Chin

CAT#	DESCRIPTION	A	B	C
4262	Small	45	47	3
4263	Medium	45	47	5
4264	Large	45	47	7

ROUND EXTENDED CHIN



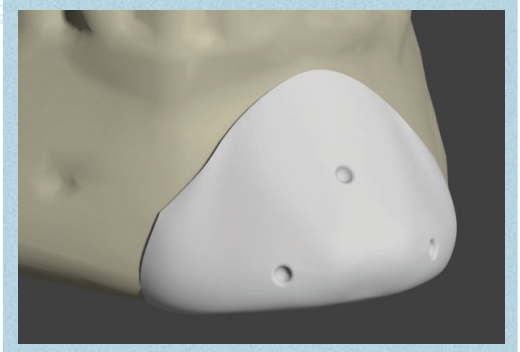
The Round Extended Chin is designed to provide tri-dimensional projection (anterior, lateral and inferior) with a rounded contour. A tab is used to join the two halves of the implant for proper alignment.



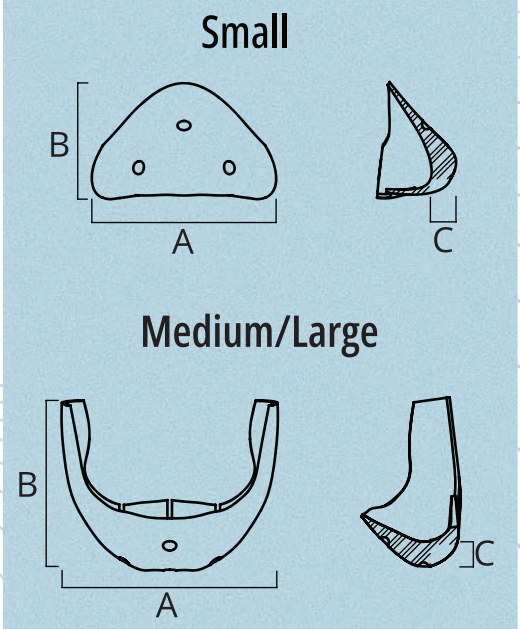
SU-POR Round Extended Chin

CAT#	DESCRIPTION	A	B	C
4259	Small	45	47	3
4260	Medium	45	47	5
4261	Large	45	47	7

BUTTON CHIN



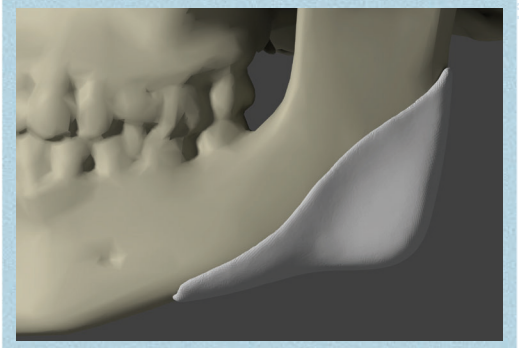
The Button Chin is designed for subtle augmentation to the medial anterior point of the chin. Having multiple sizes allows the surgeon to select the most natural looking configuration.



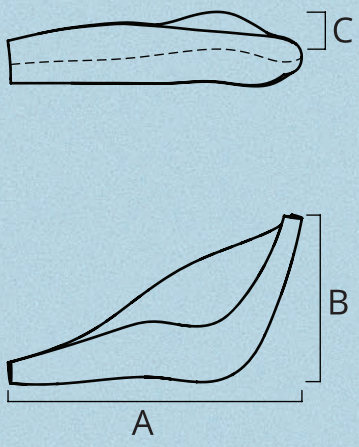
SU-POR Button Chin

CAT#	DESCRIPTION	A	B	C
4265	Small	40	25	4
4266	Medium	47.5	37.5	5.5
4267	Large	48.5	38	7

SP MANDIBULAR ANGLE



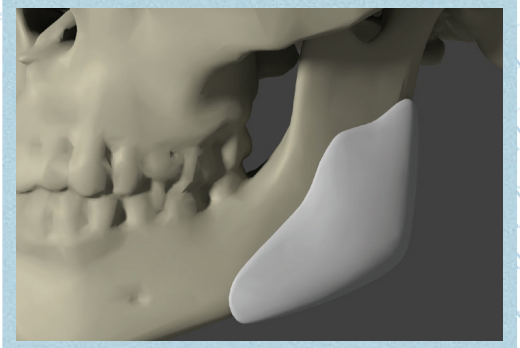
The SP Mandibular Angle is designed to conform to the posterior and inferior borders of the mandibular angle and provide augmentation to the mandible.



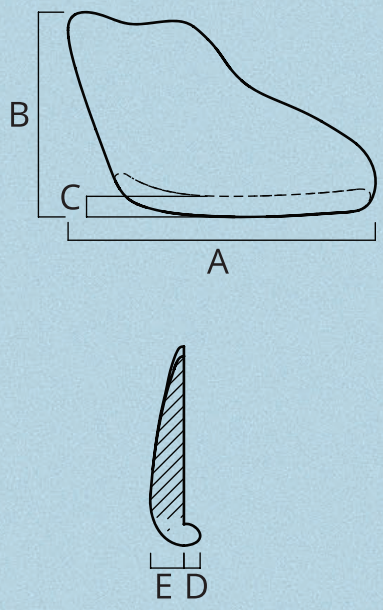
SU-POR SP Mandibular Angle

CAT#	DESCRIPTION	A	B	C
4150	Small - Left	65	35	3
4151	Small - Right	65	35	3
4152	Medium - Left	65	35	7
4153	Medium - Right	65	35	7
4154	Large - Left	65	35	11
4155	Large - Right	65	35	11

LATERAL AUGMENTATION MANDIBLE



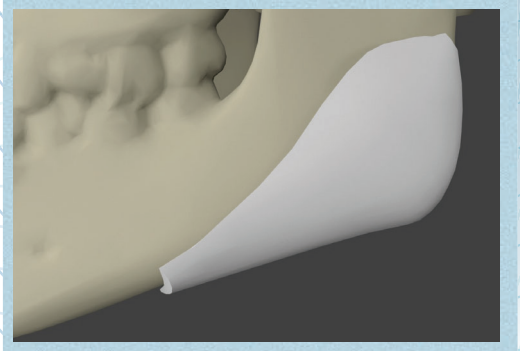
The Lateral Augmentation Mandible is designed to subtly augment the lateral projection of the mandible.



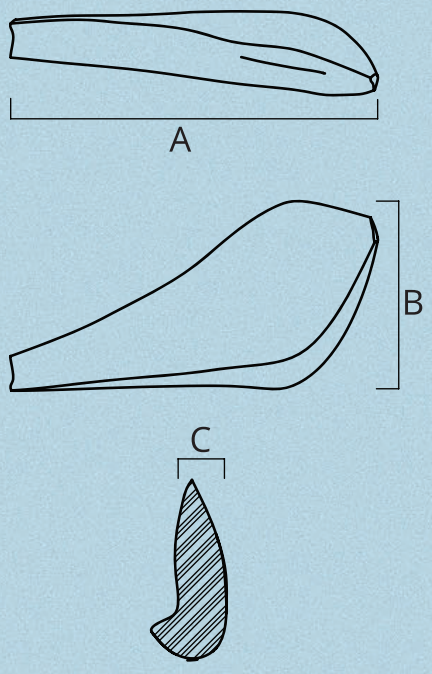
SU-POR Lateral Augmentation Mandible

CAT#	DESCRIPTION	A	B	C	D	E
4305	Regular - Left	47	38	3	3	6.5
4306	Regular - Right	47	38	3	3	6.5
4307	Large - Left	57	40	4	3	10
4308	Large - Right	57	40	4	3	10

CONTOURED MANDIBULAR ANGLE



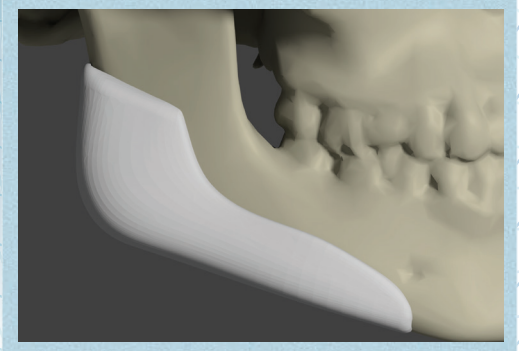
The Contoured Mandibular Angle is designed to subtly augment the mandible. The anatomic shape is designed to reduce gaps and provide a more natural fit to the patients anatomy.



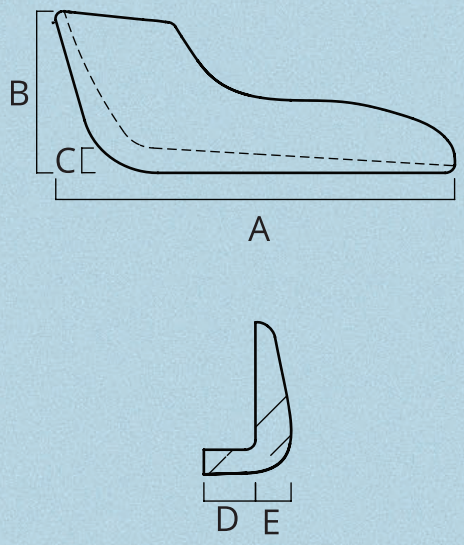
SU-POR Contoured Mandibular Angle

CAT#	DESCRIPTION	A	B	C
4303	Left	59	29	7
4304	Right	59	29	7

RAMUS OF THE MANDIBLE



The Ramus of the Mandible is designed for augmentation of the ramus of the mandible for significant augmentation.

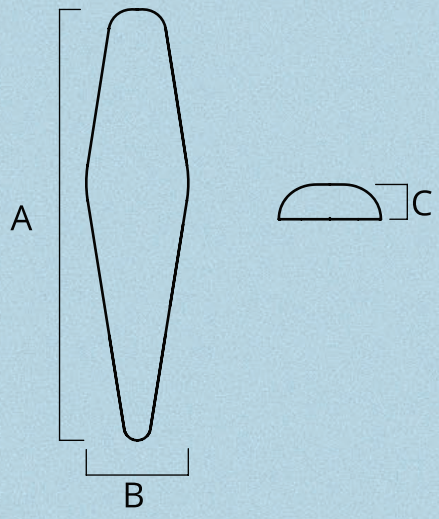


SU-POR Ramus of the Mandible

CAT#	DESCRIPTION	A	B	C	D	E
4095	Large 5mm -Left	79	32	5	10	7
4096	Large 5mm -Right	79	32	5	10	7
4097	Large 10mm - Left	79	32	10	10	7
4098	Large 10mm - Right	79	32	10	10	7
4145	Regular 5mm - Left	79	32	5	5	4
4146	Regular 5mm - Right	79	32	5	5	4
4147	Regular 10mm - Left	79	32	10	5	4
4148	Regular 10mm - Right	79	32	10	5	4

NASAL ONLAY

The **Nasal Onlay is designed to augment the dorsum of the nose. It may be used in its entirety or trimmed to meet the needs of the individual patient.**



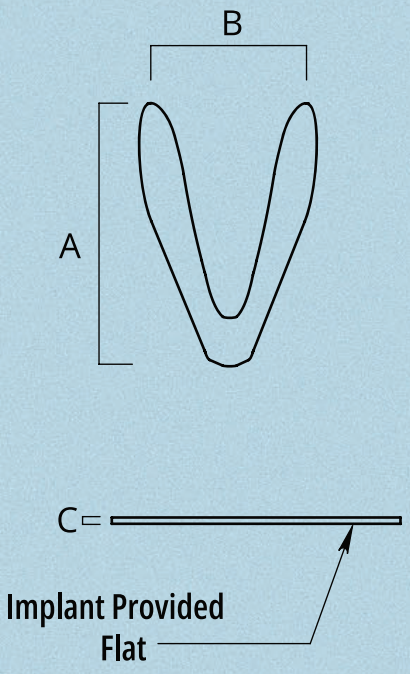
SU-POR Nasal Onlay

CAT#	A	B	C
4370	41	3.1	9

NASAL TIP TOP

The Nasal Tip Top is uniquely designed to provide strength and flexibility while supporting and reshaping the great alar cartilages.

The implant is provided flat and is intended to be folded to create nasal tip defining contours. The implant is placed over the tip cartilage and the folded angles can be modified to provide a defined or broad nasal tip.



SU-POR Nasal Tip Top

CAT#	A	B	C
4105	37	22	0.5

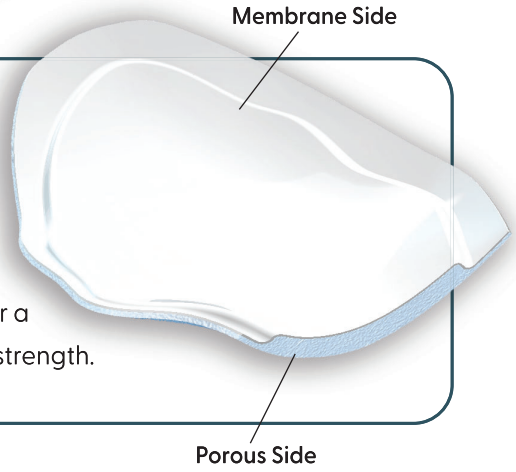
PATIENT-SPECIFIC

Complex Solutions

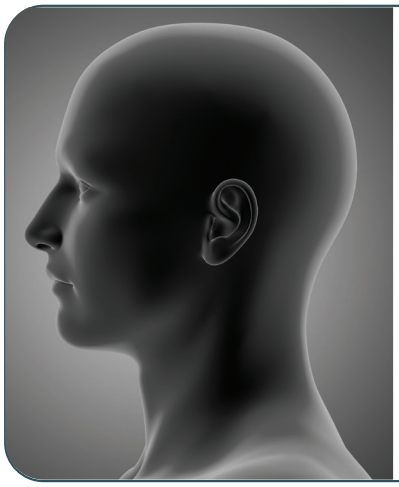
Dura-Bloc™ Technology

Dura-Bloc is an exclusive feature to the Su-Por Patient-Specific Implant program that combines traditional porous implants with innovative technology.

The smooth underside may reduce the risk of tissue adhesion, while the porous underside promotes fibrovascular and bone ingrowth. This technology allows for a 50% lower flange profile for a better cosmetic fit without compromising fixation strength.

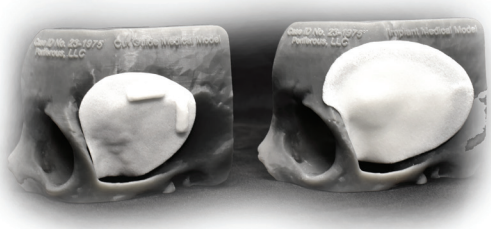


All processes are performed in-house, virtually eliminating supply chain risk.



INDIVIDUALLY CRAFTED

Implants are designed using the patient's own anatomy to provide optimal reconstruction and long term results.



SURGICAL PLANNING

Poriferous offers in-house surgical planning, allowing for resection and reconstruction in a single surgery.

WORLDS FIRST

manufacturer of Patient-Specific Ear Implants.

FEATURES & BENEFITS

precise fit

variable thickness to match native bone

proven material

over 30 years of proven clinical performance

direct fixation

intra-operative modification

virtual approval process

MR Safe

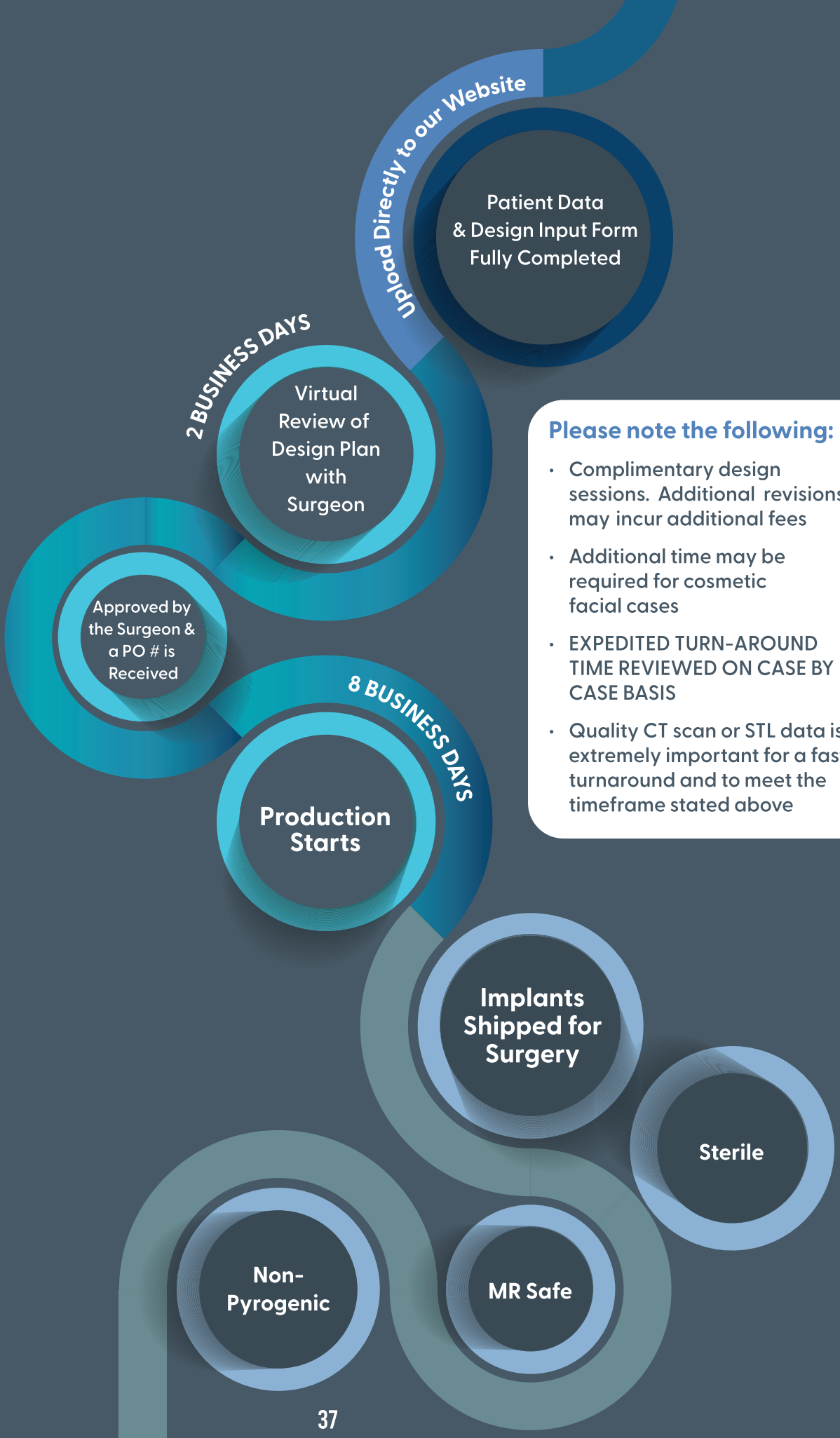
sterile non-pyrogenic

tissue integration

fast turnaround

Order shipment within 8 business days following design approval.

DESIGN PROCESS



Please note the following:

- Complimentary design sessions. Additional revisions may incur additional fees
- Additional time may be required for cosmetic facial cases
- EXPEDITED TURN-AROUND TIME REVIEWED ON CASE BY CASE BASIS
- Quality CT scan or STL data is extremely important for a fast turnaround and to meet the timeframe stated above

SCANNING PROTOCOL

The quality of the CT data is essential to the design and manufacture of Poriferous Patient-Specific Implants featuring Su-Por Biomaterial.

Provided below is the protocol to follow:

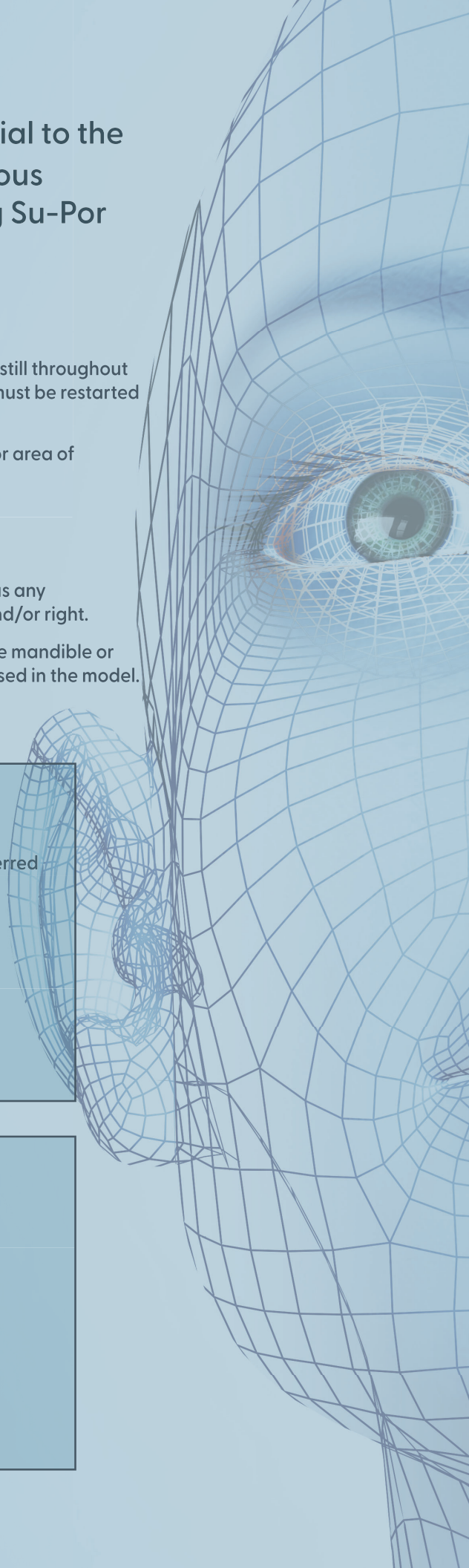
CT Scanning Guidelines

- The patient must be stabilized and remain completely still throughout the entire scan. If patient movement occurs, the scan must be restarted to achieve the best implant fit.
- The scan should include 2cm beyond the defect area or area of interest.
- Please provide the original DICOM slice data.
- Do not reformat or include viewer software with data.
- Important position or details should be noted as well as any asymmetrical element of the patient to indicate left and/or right.
- The use of a bite jib during the scanning process for the mandible or the maxilla is recommended, otherwise they will be fused in the model.

Scanning Parameters:

CRANIAL DEFECTS	Acquisition: Axial/Helical F.O.V.: Include all areas of interest. Additional 20-25 mm and above and below is preferred Gantry Tilt: 0 Spacing: Overlapping Slice thickness: 1-1.25mm(preferred) (3mm Max) · Algorithm: Standard · MA: 170ma/280kvp or lower Time: 2 seconds or less

FACIAL DEFECTS	Acquisition: Axial/Helical F.O.V.: Include all areas of interest Gantry Tilt: 0 Spacing: Overlapping Slice thickness: 1-1.25mm(preferred) (1.5mm Max) Algorithm: Standard MA: 120-180ma/120kvp or lower Time: 2 Seconds or less



Visit **www.poriferous.com**/resources *to learn more about our:*

- **Clinical References**
- **Partnership for DoD and VA Sales**
- **Reimbursement Codes**

SU-POR® by PORIFEROUS®

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