

# HIGH PRECISION BASE PLATES

# HIGH PRECISION LONG PEDIATRIC IMRT BASE PLATE IN CARBON FIBRE LAMINATE

Article No.: 32150-PED



# A. GENERAL PRODUCT INFORMATION

This product is a medical device used for patient fixation of head & neck patients in IMRT treatments. This low density plate can be used during the simulation and the treatment stage. This product may only be used in combination with immobilisation masks produced by Orfit. Orfit prohibits the use of unauthorised third-party products in conjunction with its own products.

B. PRODUCT RANGE	
	Slots for thermoplastic mask fixation
Inserts for marking knobs	
Base plate-to-couch	3.2
fixation elements	· A
	Reference holes for
	head supports,
	blocks and wedges

This base plate is suitable for use in combination with the following hardware:

ART. NO.	DESCRIPTION
35755	Head support in low density PE with lateral neck support (model A)
35765	Head support in low density PE without lateral neck support (model A)
35753	Head support in low density PE with lateral neck support (model B)
35753ZF	Head support in low density PE without lateral neck support (model B)
35752	Head support in low density PE with lateral neck support (model C)
35752ZF	Head support in low density PE without lateral neck support (model C)
32380	Adjustable prone head support
35703	Block 20 mm in CFL
35706	Block 40 mm in CFL
35704	Wedge 9° angle in CFL
35707	Wedge 18° angle in CFL

32028	2 Indexing knobs for individual cushions
35745	Table fix (fixation device)
32001	Loxon (fixation device) for HP system
35747/1	Adapter for 'two pin' system indexing bars
32110/9	EVA set medium – 13 mm – White
32110/8	EVA sets short – 13 mm – Green

A whole range of 3-, 4- and 5-points head and head & neck Efficast\* thermoplastic masks can be used on this base plate to immobilize patients. Instructions on how to make these masks can be found in the respective 'instructions for use' and on <a href="https://www.orfit.com">www.orfit.com</a>.

# C. PRECAUTIONS FOR USE

This is a fragile product, please handle with care. Always place the base plate on a flat surface. Always fix the base plate securely to the treatment couch before positioning a patient. More information on how to fix this base plate to a couch top can be found on our website <a href="http://www.orfit.com/en/fixation-devices/">http://www.orfit.com/en/fixation-devices/</a>.

If the base plate is used in overhang over the couch a Table Fix (art. no. 35744/6) or iBeam couch fixation (art. no. 32813) needs to be used at the caudal end to secure the base plate to the couch top. This prevents the base plate from falling off the table when the patient moves.

The CFL base plate is constructed to be light in weight and to have superb dosimetric properties. When handled roughly, it may get damaged and fibres may come off. When this happens, stop using the base plate to prevent fibres from getting in contact with the patient's or user's skin. Contact your distributor.

A patient set-up form is available on the Orfit website: https://www.orfit.com/app/uploads/Head-and-Neck.pdf

#### D. STORAGE

Always store the product in a safe place to prevent it from getting damaged or falling onto other objects. Prevent hard objects from falling onto the plate. Store the base plate between +10°C (50°F) and 40°C (122°F).

# E. PROPERTIES

# E.1. Physical Properties

Dimensions: L 1350 mm x W 544 mm x H 30 mm

Weight: 3,630 kg

# E.2. Mechanical Properties

Bending:

The bending (sag)  $\Delta$  Lw of the IMRT base plate (measured between the two positioning holes of the head support, at 323 mm from the 'maximum overhang line) can be calculated using the next equation:

#### $\Delta$ Lw = 0,0892W + 0,0145, where

Δ Lw is the displacement of the plate (mm)

W is the vertical force (weight), exerted at the measuring point (kg)

SD: ± 0,017 mm

#### E.3. Dosimetric Properties

 $\begin{array}{lll} \text{Attenuation factor } (\pm\,0.15~\%) \\ \text{6 MV} & 1.7\% \\ \text{15 MV} & 1.2\% \\ \text{H}_2\text{O equivalence} & 5~\text{mm} \end{array}$ 

Note: Use these numbers as a guidance only. Perform the measurements again in your department to verify these results.

#### F. MAINTENANCE AND WASTE MANAGEMENT

This product can be cleaned and disinfected by means of soapy water or an isopropanol based disinfectant, applied with a soft cloth. If unsure about the cleaning fluid, do not use. Never use aerosol sprays, corrosive cleaning agents, solvents or abrasive detergents.

Periodic checks of the product should be done to insure the parts are not worn and require repair or replacement. **Do not attempt to make repairs yourself**. Contact your distributor if there are any questions or concerns.

The product can be disposed of with household waste.

#### G. ADDITIONAL INFORMATION

For additional information such as distributor contact information, product brochures, Safety Data Sheets and regulatory information, please visit our website <a href="https://www.orfit.com">www.orfit.com</a>.

Note:

It is prohibited to make alterations to this text without prior approval from Orfit Industries.

