

THE AIO SOLUTION® 3.0 BELLY- AND PELVIC BOARD



Article Nos. :

38107 38108 38107/4
38109 38107/2 38226

A. GENERAL PRODUCT INFORMATION

These products are medical devices used for positioning and immobilisation of belly and pelvic patients in supine and prone position in radiation therapy. The products can be used during both the simulation and treatment stage, including MRI simulation.

These products 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 DESCRIPTION

This AIO Solution® 3.0 Belly- and Pelvic Board is primarily used for the treatment of malignancies in the belly and pelvic region. The system includes a set of belly & pelvic positioning cushions. It is used in combination with the Raycast® High Precision (Prone) Head Supports and Blocks & Wedges, Comfort head rest, Leg separators, AIO 3.0 base plates, AIO 3.0 Knee & Leg positioning cushions, AIO 3.0 indexable Foot Support and the Efficast® Pre-cuts to form a reproducible patient positioning and immobilisation device in the field of radiotherapy. Information on these other parts and instructions on how to make the masks can be found in the respective 'instructions for use' and on www.orfit.com.

The AIO solution® 3.0 Belly- and Pelvic Board is a modular system of which the cushions and accessories can be indexed onto the thin AIO 3.0 carbon fibre (38001, 38005, 38006, 38008 & 38009) and fibreglass (38002) base plates or directly onto the simulation and treatment couch. This allows the system being suitable for use in small bore CT and MRI scanners.

C. PRODUCT RANGE

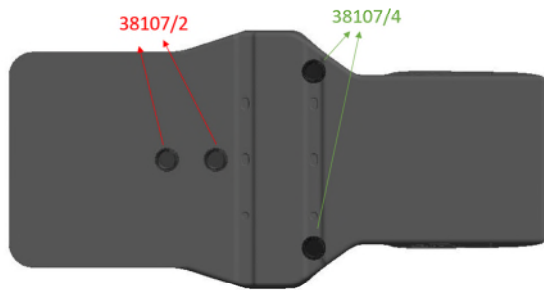
Art. No.	Description
38107	AIO 3.0 – Base Cushion
38108	AIO 3.0 – Small Cushion Insert
38109	AIO 3.0 – Full Cushion Insert
38107/2	AIO 3.0 – Indexing knob Cranial
38107/4	AIO 3.0 – Indexing knob Caudal
38226	AIO 3.0 - Prone head support for Belly & Pelvic Board

D. PRECAUTIONS FOR USE

The cushions can be used in combination with the AIO 3.0 carbon fibre and fibreglass base plates or they can be indexed directly onto the simulation and treatment couch.

When the belly & pelvic cushions are being used in combination with an AIO 3.0 base plate, always make sure that the base plate is fully supported by the simulation and treatment couch. The AIO 3.0 base plates cannot be used in overhang in combination with the AIO 3.0 belly & pelvic cushions. Also, the 0° cushion (38101) should be in place on the AIO 3.0 base plates before positioning the AIO 3.0 belly & Pelvic cushions. The 0° cushion fits in the cut-out provided in the AIO 3.0 base plates.

The Base cushion (38107) can be indexed by screwing the indexing knobs (38107/2 & 38107/4) into the holes provided on the bottom side of the cushion. Indexing knobs 38107/2 are used at the cranial end of the base cushion and indexing knobs 38107/4 are used at the caudal end of the base cushion as shown in the picture.



The protruding part of the indexing knobs will fit into the positioning holes provided in the 0° cushion and the AIO 3.0 base plates.

The Base Cushion can also be indexed directly onto the simulation and treatment couch without using an AIO 3.0 base plate. The Base Cushion is indexed by means of 2-pin or 3-pin indexing bars.

When indexing the Base Cushion directly onto the simulation or treatment couch, the indexing knobs should be unscrewed and removed. This allows the cushion to lay flat on the couch.

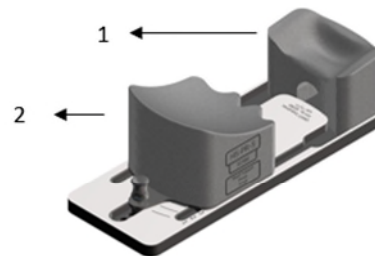
The small cushion insert (38108) fits into the cranial end of the cut-out provided in the Base Cushion. This cushion gives extra comfort in the chest region while still allowing to pull the intestines away from the treatment area. The Small Cushion Insert has 2 small cut-outs that allow comfortable positioning of the breasts for female patients.



For patients that have very little or no fatty tissue in the belly area, the Full Cushion Insert (38109) can be used. This Full Cushion Insert can also be used to position belly and pelvic patients in supine position. The Full Cushion Insert fits into the cut-out provided in the base cushion.



To position the head of the patient, an AIO 3.0 prone head support (38226) or comfort head rest (29051) can be used. The prone head support 38226 offers the opportunity to position the patient's head in a stable and reproducible way. The sides of the head support are open and there is a tunnel in the chin cushion to have enough breathing space for the patient to feel comfortable and to allow for the easy use of anaesthetic tubes. The AIO 3.0 prone head support consists of a support plate with 2 cushions. The cushion for the chin (1) is fixed. The cushion for the forehead and nose (2) can be put in 7 different positions to accommodate the differences in patient's anatomy. The support plate contains 2 round knobs on the bottom that fit into the round cut-outs provided at the cranial end of the base cushion 38107. There are 3 different positions to index the AIO 3.0 prone head support to the base cushion marked by numbers 1-3.



The comfort head rest 29051 is a soft head support in the form of a ring that allows for a comfortable positioning of the head in prone position or sideways. The comfort head rest is positioned over the cut-out at the cranial end of the base cushion 38107 and cannot be indexed.

Always verify that the cushions are correctly positioned on the base plates or the simulation and treatment couch.

The green belly- and pelvic immobilisation cushions can be combined with the AIO 3.0 Prone head support (38226), the Raycast® High Precision Head Supports and Blocks & Wedges, Comfort head rest (29051), Leg separators (32037 & 32008), the AIO 3.0 Knee and Leg positioning cushions and the AIO 3.0 indexable Foot Support (38206) to create a comfortable and reproducible position of the patient. More information on these parts can be found in the respective 'instructions for use' and on www.orfit.com.

The cushions used on the treatment machines are often used more frequently than those on the simulators and during the imaging stages. Therefore we recommend rotating the cushion

sets between the different machines on a regular basis to avoid differences in wear and tear of the cushions.

Do not expose the cushions to a hot air blower and make sure that no sharp objects can come into contact with the cushions. Do not use tape on the cushions.

Note: these cushions cannot be used on the 1st or 2nd generation AIO base plates.

A patient set-up form is available on the Orfit website.

E. STORAGE

Always store the products in a safe place to prevent them from getting damaged or falling onto other objects. Do not put heavy objects on the cushions and prevent hard objects from falling onto them to prevent permanent deformations. Avoid pressure points on the cushions during storage as these can cause imprints in the cushions. The imprints will disappear overtime when the pressure is released.

Store the system between +10°C (50°F) and +40°C (104°F).

F. PROPERTIES

38107 – AIO 3.0 Base Cushion

Physical properties:

Dimensions: L 1097 mm x W 539 mm x H 95 mm
L 43.19" x W 21.22" x H 3.74"

Weight: 2.5 kg / 5.5 lbs

Density foam: 50 kg/m³



This product is made entirely of electrically non-conductive, non-metallic and non-magnetic materials and is MRI safe.

Mechanical properties:

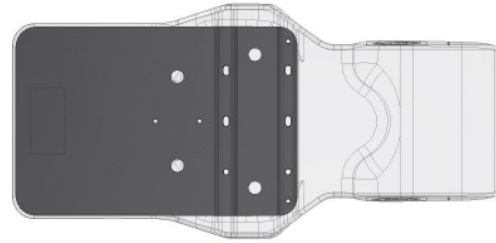
This AIO 3.0 cushion is made of a low density foam reinforced with a fibreglass insert, covered with a coating. This combination results in a stable cushion that keeps its dimensions overtime and under conditions of frequent use.

Dosimetric properties:

The attenuation and skin build-up in the treatment area (light area in the picture below) at 6 MV and 15 MV per cm of material:

Attenuation (± 0.15%)		Skin Build-up (± 0.1 mm)	
6 MV	15 MV	6 MV	15 MV
0.25%	0.15%	0.6 mm	0.6 mm

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



38108 – AIO 3.0 Small Cushion Insert

Physical properties:

Dimensions: L 207 mm x W 428 mm x H 60 mm
L 8.15" x W 16.85" x H 2.36"

Weight: 0.24 kg / 0.53 lbs

Density foam: 50 kg/m³



This product is made entirely of electrically non-conductive, non-metallic and non-magnetic materials and is MRI safe

Mechanical properties:

The AIO 3.0 cushions are made of low density foam that is covered with a coating. This combination results in a stable cushion that keeps its dimensions overtime and under conditions of frequent use.

Dosimetric properties:

The attenuation and skin build-up at 6 MV and 15 MV per cm of material:

Attenuation (± 0.15%)		Skin Build-up (± 0.1 mm)	
6 MV	15 MV	6 MV	15 MV
0.25%	0.15%	0.6 mm	0.6 mm

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

38109 – AIO 3.0 Full Cushion Insert

Physical properties:

Dimensions: L 435 mm x W 429 mm x H 65 mm
L 17.13" x W 16.89" x H 2.56"

Weight: 0.53 kg / 1,17 lbs

Density foam: 50 kg/m³



This product is made entirely of electrically non-conductive, non-metallic and non-magnetic materials and is MRI safe.

Mechanical properties:

The AIO 3.0 cushions are made of low density foam that is covered with a coating. This combination results in a stable cushion that keeps its dimensions overtime and under conditions of frequent use.

Dosimetric properties:

The attenuation and skin build-up at 6 MV and 15 MV per cm of material:

Attenuation (± 0.15%)		Skin Build-up (± 0.1 mm)	
6 MV	15 MV	6 MV	15 MV
0.25%	0.15%	0.6 mm	0.6 mm

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

38107/2 – AIO 3.0 Indexing knob Cranial

Physical properties:

Dimensions: D 51 mm x H 35 mm
D 2.01" x H 1.38"

Weight: 0.03 kg / 0.07 lbs



This product is made entirely of electrically non-conductive, non-metallic and non-magnetic materials and is MRI safe.

Mechanical properties:

The AIO 3.0 Indexing knob Cranial is made of a composite material which keeps its dimensions overtime and under conditions of frequent use.

Dosimetric properties:

This product is made of a high density material and is not intended to treat through. The product is not located in the treatment area.

38107/4 – AIO 3.0 Indexing knob Caudal

Physical properties:

Dimensions: D 51 mm x H 36 mm
D 2.01" x H 1.42"

Weight: 0.03 kg / 0.07 lbs



This product is made entirely of electrically non-conductive, non-metallic and non-magnetic materials and is MRI safe.

Mechanical properties:

The AIO 3.0 Indexing knob Caudal is made of a composite material which keeps its dimensions overtime and under conditions of frequent use.

Dosimetric properties:

This product is made of a high density material and is not intended to treat through. The product is not located in the treatment area.

38226 – AIO 3.0 – Prone head support for Belly & Pelvic Board

Physical properties:

Dimensions: L 270 mm x W 110 mm x H 100 mm
L 10.63" x W 4.33" x H 3.94"

Weight: 0.52 kg / 1.15 lbs



This product is made entirely of electrically non-conductive, non-metallic and non-magnetic materials and is MRI safe.

Mechanical properties:

The AIO 3.0 cushions are made of low density foam that is covered with a coating. This combination results in a stable cushion that keeps its dimensions overtime and under conditions of frequent use.

Dosimetric properties:

The attenuation and skin build-up at 6 MV and 15 MV per cm of material:

Attenuation (± 0.15%)		Skin Build-up (± 0.1 mm)
6 MV	15 MV	
0.57%	0.46%	1.38mm/mm material

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

G. MAINTENANCE AND WASTE MANAGEMENT

These products can be cleaned and disinfected by means of an ethanol or 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. Do not soak the cushions.** Further cleaning instructions can be found in the [Orfit Cleaning Guidelines](#).

The AIO 3.0 cushions are made of a closed-cell foam and will not absorb any cleaning agent. Periodic checks of these products 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.

These products can be disposed of with household waste.

H. ADDITIONAL INFORMATION

For additional information such as distributor contact information, product brochures, Safety

Data Sheets and regulatory information, please visit our website www.orfit.com.

Note:

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