

Contractor UPDATE

May 2024
No: 202407

Hot air tools for welding self-adhesive membrane laps

Etorch MAX with welding nozzle can also be used for welding side and head laps of self-adhesive membrane

Bauder are pleased to announce, as part of its continued commitment to provide a comprehensive technical solution, the Etorch MAX along with nozzle attachment can be used for welding the side and head laps of our self-adhesive membranes without the need for a gas torch.

Why have Bauder been working with Imperial Thermal Engineering?

We at Bauder, are seeing more Main Contractors on a sustainability drive to achieve their commitment to Net Zero Scopes 1 & 2 by 2025 and part of this mission is the replacement of fossil fuels with alternative more sustainable solutions.

To support them on this journey we have been working closely with Imperial Thermal Engineering to assist in the development of Etorch for lap welding. The technology was conceived with the aim of drying roofs, and fusing laps in bituminous sheet membranes. With our support, product development and testing has proved successful in bonding the side and head laps of all 3 layers of a self-adhesive bitumen membrane system.

Etorch MAX - Drying roof/membranes:

Drying the roof/membrane surface we have found is just as quick as using a gas torch. In some instances, we have seen it outperform a gas torch for this function. Feedback from contractors is this product is great to use as a drying out tool. There are claimed cost benefits of moving over to hot air installations - information regarding this is available from Imperial Thermal Engineering.

Bitumen self-adhesive membranes:

Using the air blade in front of the self-adhesive membrane as it is rolled out aids with adhesion of the membrane to the substrate in cooler temperatures, so long as pressure is applied to the roll to ensure no air is trapped. It is not to be used as a replacement for the Activator-Primer.

Bitumen self-adhesive membranes – lap welding:

The in-seam lap welding nozzle works well with the addition of Bauder's long handled lap roller. This was tested on AVCL, underlayer, and capping sheet. Observations show the bleed of bitumen to be neat and consistent. Feedback from Bauder Germany laboratory on the fusion between side laps and head laps of KSO-P SN and Sprint DUO was very positive.



Which self-adhesive membranes can be lap welded using the Etorch MAX?

AVCL: BauderTEC KSD FBS, BauderTHERM DS 1 DUO

Underlayer: BauderTEC Sprint DUO, BauderTEC KSA DUO, BauderTEC KSA DUO 35

Capping Sheet: BauderTEC KSO SN, BauderTEC KSO-P SN, BauderTEC KSO ALP SN

What about bonding torch-on membranes?

We do not currently endorse the use of Etorch MAX for installation of our torch-on membranes.

What will happen with regards to using or specifying the Etorch?

Bauder specifications already mention two options for hot air welding, so this will be added as a third option.

Specification clauses for suitable hot air welding equipment manufactured by 'either':

Leister - contact Welwyn Tool Group,

Contact number: 01707 331 111,

<http://www.welwyntoolgroup.co.uk>

James Lister & Sons Limited

Contact number: 0121 553 2949

Email: sales@lister.co.uk

Etorch — Imperial Thermal Engineering Ltd,

Contact number: Tel 01376 330582

<http://www.imperialthermal.co.uk>

Who will deal with queries relating to the Etorch?

Imperial Thermal Engineering will be the company to contact regarding the Etorch and its accessories—equipment, servicing, technical advice, etc.

Power supply required for ETORCH MAX: 415V, 3-phase, 32Amp. Earth & neutral required (5 pin plug).

Air Blade: Deck/substrate drying/SA sheet activation

Accessories: In-seam lap welding nozzle

Detail work: BAK ErOn or LEISTER handheld hot air blowers

X 3 Plug-in ports can accommodate hot air blowers and self-driving lap welding devices (220/240V)

If you have any questions, please do not hesitate to contact me.

Richard Clennell

RBM & Insulation Product Manager

r.clennell@bauder.co.uk

07824 539684