

CLAIMS

1. A gas flow system comprising at least a first and a second hollow cuboid
shaped gas flow element, each gas flow element having an interior space, six
5 open faces, eight vertices and twelve edges interconnecting the eight vertices,
wherein the four edges of at least one open face of the first gas flow element is
connected in a gas tight manner to four edges of an open face of the second
hollow cuboid shaped gas flow element at their respective connecting open
faces and
10 wherein a valve is present at the connecting open faces which has an open
position or positions thereby fluidly connecting the interior space of the first
hollow cuboid shaped gas flow element with the interior space of the second
hollow cuboid shaped gas flow element to enable a first gas flow to flow from a
hollow cuboid shaped gas flow element to the other hollow cuboid shaped gas
15 flow element of the system and wherein the valve has a closed position thereby
fluidly disconnecting the interior space of the first hollow cuboid shaped gas
flow element with the interior space of the second hollow cuboid shaped gas
flow element, or
wherein a partition is present at the connecting open faces thereby fluidly
20 disconnecting the interior space of the first hollow cuboid shaped gas flow
element with the interior space of the second hollow cuboid shaped gas flow
element enabling a second gas flow through the first hollow cuboid shaped gas
flow element and a fluidly disconnected third gas flow through the second
hollow cuboid shaped gas flow element.
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2. A system according to claim 1, wherein the cuboid is a rectangular cuboid.
3. A system according to claim 2, wherein the cuboid is a square cuboid.
- 30 4. A system according to any one of claims 1-3, wherein the hollow cuboid shaped
gas flow element is a single injected moulded work product.

5. A system according to any one of claims 1-3, wherein the four edges of the connecting open face is provided with connecting means to connect to the four edges of the connecting open face of the second hollow cuboid shaped gas flow element.
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6. A system according to claim 5, wherein the means to connect the four edges of the first hollow cuboid shaped gas flow element with the four edges of the second hollow cuboid shaped gas flow element are extensions from the edges of the first hollow cuboid shaped gas flow element first which extension can form a snap-fit connection with the edges of the second hollow cuboid shaped gas flow element.
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7. A system according to any one of claims 1-6, wherein the valve is a rotating valve as present in a rectangular shaped frame and wherein the rectangular shaped frame is connected to the edges of the connecting face of the first or the second hollow cuboid shaped gas flow element.
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8. A system according to any one of claims 1-6, wherein the partition is a rectangular shaped closed frame and wherein the rectangular shaped frame is connected to the edges of the connecting face of the first or the second hollow cuboid shaped gas flow element.
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9. A system according to any one of claims 1-6, wherein at their respective connecting open faces the four edges of the open face of the first gas flow element is connected in a gas tight manner to four edges of the open face of the second hollow cuboid shaped gas flow element by means of a connecting frame,
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- wherein the connecting frame is provided with means to connect to the four edges of the open face of the first gas flow element and is provided with connecting means to connect to the four edges of the open face of the second hollow cuboid shaped gas flow element.
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10. A system according to claim 9, wherein the connecting frame comprises a valve or wherein the connecting frame is closed to form the partition.

11. A system according to any one of claims 4-9, wherein the hollow cuboid shaped gas flow element and/or the optional connecting frame is made of polypropylene (PP) and/or polyoxymethylene (POM).
- 5 12. A system according to claim 11, wherein the means to connect the connecting frame to the edges of the open faces of the first and second hollow cuboid shaped gas flow element is a snap-fit connection.
- 10 13. A system according to any one of claims 1-12, wherein the remaining open faces of the first or the second hollow cuboid shaped gas flow element are enclosed in a gas tight manner by an enclosing wall element which is connected to the four edges of the open face or connected to a further cuboid shaped gas flow element or connected to a gas inlet or connected to a gas outlet.
- 15 14. A system according to claim 13, wherein the enclosing wall element is connected to the four edges by means of a snap fit connection, wherein means as present on the enclosing wall form a snap fit connecting with the edges of the open face.
- 20 15. A system according to any one of claims 1-14 as used as a header of a heat exchanger comprising two parallel rows of fluidly connected hollow cuboid shaped gas flow elements, wherein the two rows are interconnected via a number of connecting open faces provided with a partition and wherein the
- 25 resulting second gas flow and third gas flow are the gas flows exchanging heat in the heat exchanger.