

CLAIMS

1. A dual-channel showerhead, comprising:
 - an upper plate that defines a first plurality of apertures;
 - a base comprising a lower plate, the lower plate defining a second plurality of apertures and a third plurality of apertures, wherein:
 - each of the first plurality of apertures is fluidly coupled with a respective one of the second plurality of apertures to define a fluid path extending from a top surface of the showerhead through a bottom surface of the showerhead;
 - the base defines a gas inlet that is fluidly coupled with the third plurality of apertures by a plenum;
 - the base is detachably coupled with the upper plate using one or more fastening mechanisms; and
 - a compressible gasket that fluidly isolates the first plurality of apertures and the second plurality of apertures from the third plurality of apertures,
 - wherein the compressible gasket is positioned between the upper plate and the lower plate; and
 - wherein a bottommost end of the compressible gasket forms a top end of the plenum.
2. The dual-channel showerhead of claim 1, wherein:
 - each of the third plurality of apertures is fluidly isolated from the first plurality of apertures and the second plurality of apertures.
3. The dual-channel showerhead of claim 1, wherein:
 - the plenum fluidly couples the gas inlet with each of the third plurality of apertures.
4. The dual-channel showerhead of claim 3, wherein:
 - the base defines a recursive flow path that fluidly couples the gas inlet with the plenum.
5. The dual-channel showerhead of claim 1, wherein:
 - the gasket comprises a body characterized by a top surface and a bottom surface;
 - one or both of the top surface and the bottom surface comprise a plurality of spigots that protrude outward from the body of the gasket; and
 - each of the plurality of spigots is vertically aligned with a respective one of the first plurality of apertures.

6. The dual-channel showerhead of claim 1, wherein:
the gasket comprises polytetrafluoroethylene (PTFE).
7. The dual-channel showerhead of claim 1, wherein:
one or both of a top surface of the gasket and a bottom surface of the gasket
comprise a plurality of spigots that protrude outward from a body of the gasket; and
the gasket has a thickness that decreases as a radial distance from a center of the
gasket increases.
8. The dual-channel showerhead of claim 1, wherein:
the lower plate is detachably coupled with the base using one or more fasteners.
9. The dual-channel showerhead of claim 1, wherein:
the gasket has a thickness that decreases as a radial distance from a center of the
gasket increases.