How do you insulate a brick and block construction?

Boris lives in a 45 year old bungalow that has no insulation at all. It has a brick outside, an air space, a concrete block wall for structure inside and then drywall. Is it possible to blow foam into the space between the brick and the block? NO. As long as the brick is the weather shield for the house, it needs that air space to remain dry. Fill the space and water will tend to move across the brick and into the house. The air space acts as both a drainage path for cracks in the mortar, and as a drying path for wet bricks. Check out my discussion about "Rain Screens" in the Nuts&Bolts section. If you want to insulate on the inside of the house, either remove the drywall, or go right over it, with rigid foam insulation panels and more drywall. That of course does not insulate in the floor/ceiling space, nor the area of the exterior walls that the partition walls butt into. For full details on this task see Insulating an Above Grade Block Wall from the Inside. If you want to insulate on the outside of the house, you could cover the brick with insulation, building paper, strapping, and then siding of any kind. This is essentially making a new wall on the outside. Then, in theory, you could fill the space between the brick and the block, but this step would cost more than it is worth and the expanding foam always risks pushing the bricks forward. Both of these methods require major work, including extending windows, doors and electrical outlets to match a fatter wall. It is a big job, but either technique can make a very big difference in the energy performance of the house.

Keywords:
Structure, Walls, Brick, Siding, Strapping, Cracks, Mortar, Concrete, Techniques, Insulation, Blocks, Foam