Towering above the rest

The J42 goes up in the world

For several years the Elster Jeavons J42 meter service regulator has been used throughout the world in domestic installations of many different kinds. Revolutionary when it first came out, it continues to be the benchmark for performance, quality and value for low pressure residential supply.

Most applications call for the unit to reduce distribution pressures of around 75 – 200 mbar down to an outlet pressure of 20 – 30 mbar. However in some markets the J42 is called upon to control variation in gas pressure caused by another phenomenon.

Some gas companies supply gas to residential customers at a pressure suitable for use without further reduction. However when the customer is in a high rise building the height of the apartment building causes a marked rise in supplied pressure in the upper floors. Because the gas in the pipes is lighter than the surrounding air, it tries to rise above it causing the pressure in the pipes to increase as you go up the building. This effect is always present, but in more modest apartment buildings does not show a large enough pressure shift to require attention.

Residential buildings of fifty or sixty stories are not uncommon in some cities so something has to be done to ensure an even distribution pressure to all residents. In order to limit the effect of altitude the gas companies install a J42 meter service regulator to each apartment above a certain level, often the twentieth floor. This ensures that all customers have a constant and dependable supply of gas, however high they find themselves.

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Situation of a typical 35 story building