Can you develop an isolated ground using an isolation transformer - such as an EE75T3H for example?

Contractors are sometimes required to create an isolated ground, or IG system at the transformer secondary. Many installers have conceptual problems with IG systems. Some think that it means that the secondary neutral is not grounded, others interpret that a separate ground bar is required in the transformer. Neither of these are correct. To originate an IG ground wire at the transformer, simply carry a separate, IG ground conductor from the equipment ground point in the transformer to an isolated ground bar in the secondary panel.

The isolated ground and the equipment ground originate from the same ground point within the transformer, where they are bonded to building ground, but remain separated in the panel and in all branch circuits.
The purpose of isolated ground is to provide a single point ground for all load point receptacles, rather than the multiple grounds and potential ground current loops associated with a traditional, daisy chained equipment ground schemes.
It?s thought that IG systems provide improved resistance to load equipment disturbances caused by ground loop currents and common-mode transients.

The minimum requirements for isolated ground systems are outlined in the National Electrical Code. Further information can be found in the IEEE 1100 ?Emerald Book? on grounding sensitive electronic equipment.

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