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| **Appendix 4 - Multi Occupancy - Risk Assessment for the Design of Meter Banks, Risers and Laterals in accordance with IGEM/G/5, IGE/TD/4** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **Project Title:** | |  | | | | | | | | | | | | | | | | | **Project Number:** | | | | | |  | | | | | | | | | | | | | |
| **Block Name/Number:** | |  | | | | | | | | | | | | | | | | | **Design Revision:** | | | | | |  | | | | | | | | | | | | | |
| **No. of Gas Supplies:** | |  | | | | **No. of Storeys in the Building:** | | | | | | | | | | |  | | | | | | | | **Building Use:** | | | | |  | | | | | | | | |
| **Building Type:**  **(*Delete as appropriate*)** | | Reinforced Concrete Frame | | | | | | Steel Frame | | | | | | | | | Timber Kit | | | | | Cross Laminated Timber | | | | | | | Double Brick/Block | | | | | | Other (*please detail*) | | | |
| **Location of Installation:**  **(*Delete as appropriate*)** | | Underground Car Park | | | | | | | | | Basement | | | | | | | | | Within Individual Dwellings | | | | | | Meter Room Ground Floor / Carpark | | | | | | | | Meter Room Each Flat | | | | |
| **Type of System:**  **(*Delete as appropriate*)** | | Domestic Meter bank | | | | | | | | | | Commercial Meter bank | | | | | | | | | | Internal Riser | | | | | | External Riser | | | Energy Centre / Bulk Supply | | | | | | | |
| **Type of Construction:**  **(*Delete as appropriate*)** | | Welded Steel | | | | Screwed Steel | | | | | | | | | MDPE | | | | | | **Type of Entry:**  **(*Delete as appropriate*)** | | | | Above Ground | | | Below Ground (*Sealed*) | | | Below Ground (*Ground floor*) | | | | | | Below (*Other*) | |
| **RISK** | | | | | | | **RISK CONSIDERED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **YES** | | | **N/A** | | | **NO** | | | **If YES provide details, If NO or N/A provide reason why** | | | | | | | | | | | | | | | | | | | | | | |
| 1. Meter Banks - Risk of flooding *(check flood maps)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Has the design requirements, in particular ventilation obligations been discussed with the developer/architect and detailed on the design drawing? | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **RISK** | | | | | | | **RISK CONSIDERED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **YES** | | | **N/A** | | | **NO** | | | **If YES provide details, If NO or N/A provide reason why** | | | | | | | | | | | | | | | | | | | | | | |
| 1. Risk of vandalism *(check* [*www.police.uk*](http://www.police.uk)*)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Has PIV been designed in accordance with IGEM/G/5? | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Plots from each riser/manifold identified on design drawing? | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of load and usage of gas *(check for instantaneous boilers; I&C communal boilers, boosters)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of materials and jointing methods (*details & standards to be specified on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of building entry method (*details to be included on design drawings)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Has a GIS/E/17:2018 compliant electrical insulation joint been installed? | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **RISK** | | | | | | | **RISK CONSIDERED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **YES** | | | **N/A** | | | **NO** | | | **If YES provide details, If NO or N/A provide reason why** | | | | | | | | | | | | | | | | | | | | | | |
| 1. If internal isolation joints do not comply to GIS/E/17:2018, what alternative methods of electrical insulation been considered? (*In lieu of a compliant fitting*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of corrosion and protective measures (*details & standards to be specified on design drawings*) e.g. One coat of high build zinc phosphate primer, plus two coats of Micaceous Iron Oxide (*MIO*) paint for carbon steel and Zinga field applied coating for galvanised joints or tool marks | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of the usage of the areas where the gas installation is to be installed | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Special consideration to occupancy type *(e.g. elderly, children, etc)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration to type of installation following hierarchy | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **RISK** | | | | | | | **RISK CONSIDERED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **YES** | | | **N/A** | | | **NO** | | | **If YES provide details, If NO or N/A provide reason why** | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of access for maintenance/inspection of gas installation (*details to be included on drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Security considerations: how is access made 24/7/365? Type and availability of key, emergency services *(Note: legal requirement)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. All valves installed as defined in IGEM/G/5 (*lateral isolation valves must be used before entering individual flats – valves labelled on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration to use Thermal Cut Off Valves, identify reason for fitting (*details to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration to use Excess Flow Valves, identify reason for fitting (*details to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of the pipeline entering a confined space *(mitigation detail required)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **RISK** | | | | | | | **RISK CONSIDERED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **YES** | | | **N/A** | | | **NO** | | | **If YES provide details, If NO or N/A provide reason why** | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of ventilation: direct or indirect, amount of ventilation, supported by mechanical means? (*details to be included on design & Architect drawings – design should include DSEAR assessment*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Is extension ventilation ducting required? (*details to be included on design & Architect drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of means of escape: sole means of escape, common means of escape, alternative common means of escape *(check Architect drawings, details to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of meter location within flats: TCO required where meter installed in individual sole means of escape if not housed within ½ hour fire rated compartment with self-closing door *(location to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of meter locations on common sole means of escape *(meters cannot be installed in this location or within a room opening onto the common sole means of escape)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **RISK** | | | | | | | **RISK CONSIDERED** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **YES** | | | **N/A** | | | **NO** | | | **If YES provide details, If NO or N/A provide reason why** | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of meter locations on common alternative means of escape *(TCO, EFV, adequate fire protection required, means of escape – location to be included on design drawings)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of meter locations within meter boxes (*type of box, position – location to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of meter bank locations (*consumer access to ECV, means of escape, protection – location to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration to use flexible fittings (*details to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of building movement in timber framed buildings (*entry detail – details to be included on design drawings*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Consideration of type of building construction *(building susceptible to progressive collapse under a gas explosion e.g. panel construction, cross laminate timber)* | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
| 1. Other risks (*define below*) | | | | | | |  | | |  | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | |
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| **Assessed by Gas Designer: (PRINT NAME)** | | | | |  | | | | | | | | | | | | | | | | | | **Signature:** | | | |  | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | **Date:** | | | |  | | | | | | | | | | | |
| **Authorised by: (PRINT NAME)** | | | | |  | | | | | | | | | | | | | | | | | | **Signature:** | | | |  | | | | | | | | | | | |
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