Number of equipment & materials submittals in a large scale project:

|  |  |
| --- | --- |
| 200+ submittals, under various headings, including but not limited to: | |
| Building structure & fabric | * Steel * Concrete * Other metals * Masonry * Seals & joints * Doors & windows |
| Large HVAC | * Air handlers / ventilation equipment * Chillers * Cooling Towers * Boilers * Pumps * Terminal Units * Fans * Fan/pump drives |
| Small HVAC | * Pipes * Valves * Dampers * Diffusers/grilles * Perimeter radiation |
| Large Electrical | * Transformers * Switchgear * Distribution panels * Automation Systems (BMS/EMS/IoT) |
| Small Electrical | * Lighting * Switches * Cables * Local panels |
| Fire Protection | * Piping * Valves * Pumps * Sprinkler heads |
| Plumbing | * Piping * Valves * Pumps |
| Finishes | * Framing & drywall * Fire stopping * Paint & wallpaper * Doors & door hardware |

An A/E (architect/engineer) is typically allowed 1-2 weeks to review a submittal, and often client review is also required. Submittals can take 10-15 calendar days to be reviewed – if not approved, any comments or rejections can further delay.

An A/E in Boston has a typical annual salary of $80,000 plus benefits. This works out (including benefits) to more than $40/hour in cost to the design firm. If an A/E spends an average of 2 hours reviewing each submittal (larger submittals might take more time, smaller will take less), on average, the design firm has spent over $80 per submittal in personnel-power alone. With over 200 submittals, this can work out to over $16,000 in personnel costs to a design firm during the construction process.