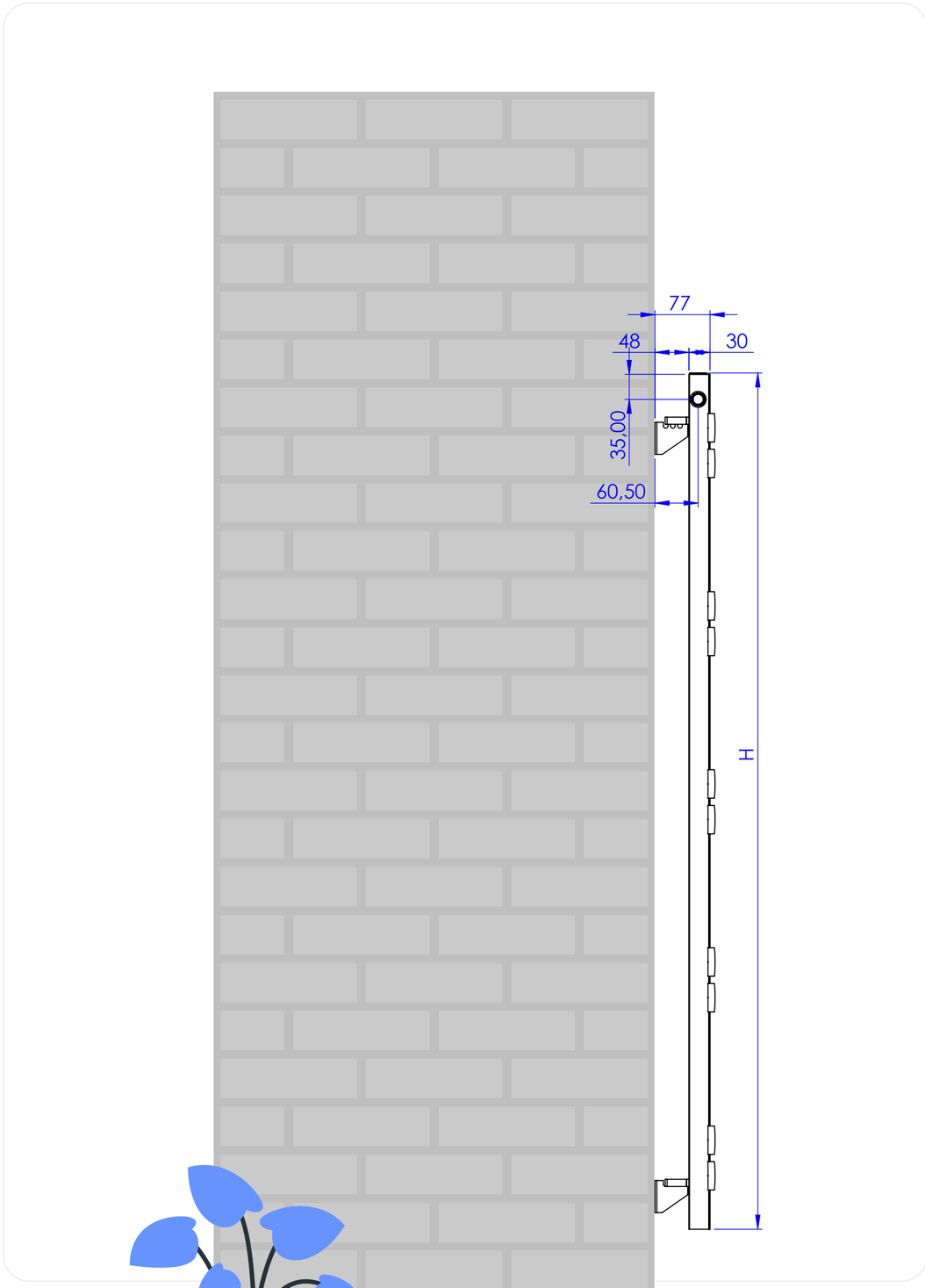QA-GU-ASM