



# JOB DESCRIPTION: VDC SPECIALIST

**Position Summary:** The Virtual Design and Construction (VDC) Specialist works closely with the company's Vice President of Construction Technology and our client's project stakeholders to manage and implement VDC & BIM needs and initiatives for Skywrite Group clients.

## Project Management:

*Skywrite Group's Virtual Design and Construction Specialists act as the hub-of-the-wheel point of contact for all project stakeholders. Our flat organizational structure provides the VDC Specialists with a wide span of control and a short chain of command. VDC Specialists have autonomy of their projects, allowing them increased adaptability, faster decision times, clearer communication, and lower operational costs.*

*A VDC Specialist's Project Management duties may encompass:*

- Update, maintain, and/or distribute documents
- Maintain communications with the general contractor, field personnel, AECs, et al
- Coordinate project-specific hardware/software requirements with project teams and IT to allow for subcontractors and other team members to receive, coordinate and update electronic models
- Host or attend project coordination meetings as required
- Use checklists set up for quality control on each project
- Coordinate BIM file exchange by preparing and maintaining submittal logs and archiving milestone submittals
- Create, review & track RFIs (Request for Information)



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## Production:

*Every Skywrite Group Virtual Design & Construction Specialist has MEP-specific field experience lending them unmatched expertise as a foundational background for preparing BIM Models. It is through this lens our VDC Specialists create timely and accurate models and deliverables by applying judgment, evaluating for the best approach, and making decisions with respect to the drawings and input interpretation for the life of a capital construction project based on their professional training and experience.*

*A VDC Specialist's Production duties may encompass:*

- Create fabrication drawings that are professional and accurate using architectural, structural, and mechanical contract prints consistent with company engineering standards
- Apply Six Sigma/Lean philosophies to modeling, reducing costs through efficient materials use
- Create constructible models where spool lengths comply with client specifications or site restrictions, routing is in accessible areas, and the model is fully installable
- Lead project-specific clash detection efforts, and assist in clash resolution (both hard and soft collisions) by assigning viewpoints for detailers to reference while clearing clashes
- Collect field data through reality capture with a variety of terrestrial laser scanners on a range of project types
- Process point cloud and imagery data, including registration, cleaning, feature extraction, modeling (Faro Scene & Revit), and file management
- Apply BIM coordinate systems to the job site through point layout by connecting building models to field construction workflows using robotic total station or GPS
- Establish a property corner or job site control and checkpoints against contract documents to ensure easements, setbacks, and property boundaries are within specification
- Customize libraries of families and templates to the client's specifications
- Customize sheet layouts, dimensions, styles, scales, and viewpoints to the client's specifications
- Prepare, as-needed, construction documentation management for the facility, which may include scanning paper plans into PDF, file organization, and asset management
- Prepare, as-needed, project closeout documentation, which may include owner manual creation, 360-degree Matterport file, as-builts documentation, Google Tours
- Create BOMs (Bills of Materials)
- Create Points for all RTS & GPS, such as Trimble™, Topcon™, et al
- Coordinate and manage Revit™ models
- Create Revit families and AutoCAD™ blocks
- Maintain project drawing files, drawing library, and associated records and documentation for each project
- Review all work for completeness and accuracy



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## Expertise:

*Skywrite Group Virtual Design & Construction Specialists are on the front line and must also be at the leading edge. Learning and teaching are in our organizational DNA. Along with keeping clients and coworkers informed of current projects, our VDC Specialists act as digital catalysts, continually reevaluating the status quo and incorporating new technologies and processes that bring efficiencies to our clients and ourselves.*

### *A VDC Specialist's Expertise duties may encompass:*

- Maintain all United Association certifications and licensure required for access to worksites
- Manage internal shared drives so that all employees can access files and project information
- Contribute to Skywrite Group's development of VDC documentation standards based on best practices
- Keep current in all 3D concepts, practices, and improvements
- Evaluate and recommend software necessary to support VDC/BIM goals, including but not limited to authoring tools/platforms, mobile technologies, and software for project information management, analysis, estimating, take-off, specification, simulation, and collaboration
- Evaluate and recommend construction-technology-related hardware and tools to support VDC/BIM goals, such as drones, lasers, scanners, sensors, virtual reality (VR), augmented reality (AR), machine learning systems
- Represent Skywrite Group at VDC/BIM Construction Technology conferences, seminars, and workshops; disseminate learnings to teammates upon return
- Provide early modeling for presentation and sales support
- Act as subject matter expert for non-VDC Specialist employees and vendors

