



**26 February 2016**  
**Position Announcement**

**Project Engineer: Dynamic Thermal/Energy Simulation**

Transsolar is an international climate engineering firm determined to create exceptional, highly comfortable indoor and outdoor spaces with a positive environmental impact. We are seeking talented, highly motivated engineers for our New York office.

Transsolar engineers carry out a broad range of tasks. Responsibilities for this position include:

- Development, testing and validation of concepts via thermal simulation (TRNSYS)
- Engineering analysis and tool development via EES, hand calculation, spreadsheet analysis, and other engineering analysis tools
- Whole-building energy simulation via TRNSYS and eQuest (including LEED certification submission)
- Internal coordination with other simulation specialists, synthesis, and communication of overall analysis results
- Graphical representation of climate concepts and complex engineering analysis
- Writing reports and correspondence
- Development of climate and energy concepts in response to local climate, site, architectural, and programmatic requirements
- Participation in meetings and design charettes
- Collaboration with German Transsolar offices
- Domestic and international travel to project meetings and sites

**The ideal candidate will exhibit:**

- Engineering or applied science education related to building energy flows and building science: heat transfer, thermodynamics, fluid mechanics, indoor and outdoor human comfort, etc.. An M.S. is strongly preferred.
- Proven ability to develop and articulate novel/undefined engineering problems beginning with fundamental physics and use both analytical and computational methods to analyze unique and complex building physics
- Experience with conventional whole-building energy simulation
- Proven ability to creatively develop and apply non-traditional climate solutions to the indoor environment
- Education/professional experience with current and advanced architectural technologies (e.g. building envelope) and mechanical systems for building climate control
- Experience with physical testing of engineering systems: system construction, instrumentation and measurement, etc.
- Experience collaborating and communicating in the early stages of an architectural design process with both technical and non-technical audiences
- Excellent oral and written communication skills

An engineering- or science-based degree is required for this position. Prior experience with TRNSYS is not required.

Interested applicants may submit their resume and cover letter via email to [nycjobs@transsolar.com](mailto:nycjobs@transsolar.com)

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## **About Transsolar**

### *Who we are*

Transsolar is an international climate engineering firm determined to create exceptional, highly comfortable indoor and outdoor spaces with a positive environmental impact. We believe that the very measures taken to create remarkable architecture can simultaneously enhance human experience and minimize resource use. To us, sustainability is not separate from design, but an indispensable component that enhances the experience of the built environment.

### *What we do*

We are vision facilitators, idea generators, and design integrators. Our engineers are not just experts in basic physical principles; their creativity enables the collaboration necessary to develop deeply integrated comfort and energy concepts. Beginning from a project's earliest conception, we work alongside the client, architect, design team, and the most vital participants of all – the occupants. We study the seasonal behavior of sun, wind, heat, light and other energy flows in and around the building, and formulate concepts based on the complex interdependence of the local climate, user needs, architectural design and engineered systems. Our toolbox is ever-growing with simulation models, custom software, tailored engineering analysis, and physical experiments used to develop and validate these ideas.

### *What we offer*

We believe that the built environment is more than the physical building. Our approach explores all factors affecting the occupant experience - including their variation in time and space. Indoors or outdoors, a climate is continually changing. We respond with dynamic solutions that work with this natural variability, not against it. While we are constantly developing new technologies and finding innovative applications, we recognize that technology alone is not the answer. We are pioneers in implementing passive design strategies, and pride ourselves in their application in built, significant projects, both large and small.

Our product is a process. We ask difficult questions, challenge convention and propose new solutions, and thoroughly test ideas. Each project requires both sharing our knowledge and generating new ideas – ultimately creating unique experiences, but always achieving the same goal: High Comfort, Low Impact.