



India Chapter



Ashrae Headquarters
Atlanta, USA



Ashrae India Chapter
New Delhi

ASHRAE INDIA CHAPTER

For the
HVAC&R
Industry.

BULLETIN

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Presidential Message

My Fellow ASHRAE India members,

This is the first issue of the year 2013 and we have a very good news to share.

For the first time in the history of Region At Large (RAL) ,we, Ashrae India Chapter, have won a ASHRAE Technology Award.



Dr. P.C. Jain
Past President of
ASHRAE India Chapter

The sole entry from RAL in last 10 years came from Dr. Prem C Jain of ASHRAE India Chapter . His entry has won a special recommendation from the society.

It is indeed a proud moment for all us. Please join me in congratulating Dr. Jain for this honor .

Let us all take inspiration from Dr. Jain

and carry the torch further by strengthening our technological knowledge base .

ASHRAE India Chapter(AIC) welcomes its members to become a part of ASHRAE Technical Committees (TCs). The technical expertise of ASHRAE is concentrated in its Technical Committees. ASHRAE Technical Committees consist of people who have a



recognized proficiency in a specific field of interest.

Please let us know your field of interest

- Sustainability
- Chillers

Email your choice to the chapter secretariat at dineshrawat@ashraeindia.org.

Don't miss this opportunity to be part of TECHNICAL COMMITTEE at AIC where you will get to share and learn the latest development in the world and know the authorities of the HVAC industry worldwide.

We look forward to interacting with you during ACRECONF 2013 (February, 8th & 9th, Delhi) and ACREX 2013 (March 7th - 9th, Mumbai)

Wish you all the very best for 2013

Dinesh Gupta

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*FTR25-32EVM / FTR25-32EVM

Full day Technical workshop on APPLIED PSYCHROMETRICS



ASHRAE India Chapter organized a Full day Technical workshop on APPLIED PSYCHROMETRICS on 3rd Nov., 2012 at K-43(Basement), Kailash Colony, New Delhi - 110048. The workshop was held by Mr. Rajinder Singh. Mr. Rajinder Singh is Senior faculty in Refrigeration & Air-Conditioning Department, G.B.Pant Polytechnic. The workshop was attended by more than 25 participants and was appreciated by the participants.

Technical Programme at Thapar University



Technical workshop on 'Automotive Airconditioning' was held on 24th Nov., 2012 at Thapar University for the benefit of Student members. Mr. U S Jadon who is faculty in Manav Rachana University presented the workshop.



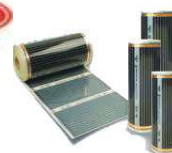
Duct Heaters



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Student Membership Promotion



Student membership promotion programme was held on 16th Oct., 2012 at Thapar University. Mr. Rajender Singh gave a presentation on 'Scope of Refrigeration & Air-conditioning in India' to the faculty and students present. Awareness about ASHRAE membership benefits to students was created among the students present.

Presentation on Energy Savings in Modern Buildings by Hydronic balancing

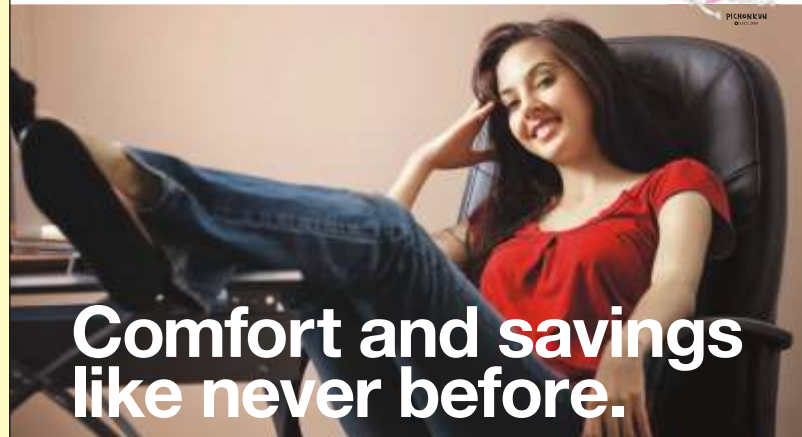


ASHRAE India Chapter in association with Oventrop organized a Technical Presentation on 'Energy Savings in Modern Buildings by Hydronic balancing'. Mr. Thomas Schmidt and Mr. Sunil Anand from Oventrop gave the presentation. The event was well attended and followed by Networking Dinner.

Advertise With Us

ASHRAE India Chapter Newsletter tariff card for Advertisement is given below

Description	Rates for Individual Issue	For Booking, Please Contact
Center Page Spread	Rs. 30,000	Mr. Dinesh Rawat, Exe. Secretary, ASHRAE India Chapter K-43 (Basement), Kailash Colony Delhi-110048, India Telefax : +91-11-41635655 E-mail : dineshrawat@ashraeindia.org Website : www.ashraeindia.org
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As a continuing policy of product innovation at Daikin, the design and specifications are subject to change without prior notice. The visual of the products shown above is representative only, actual product might differ from the one shown above.

DUAL SKIN FACADES

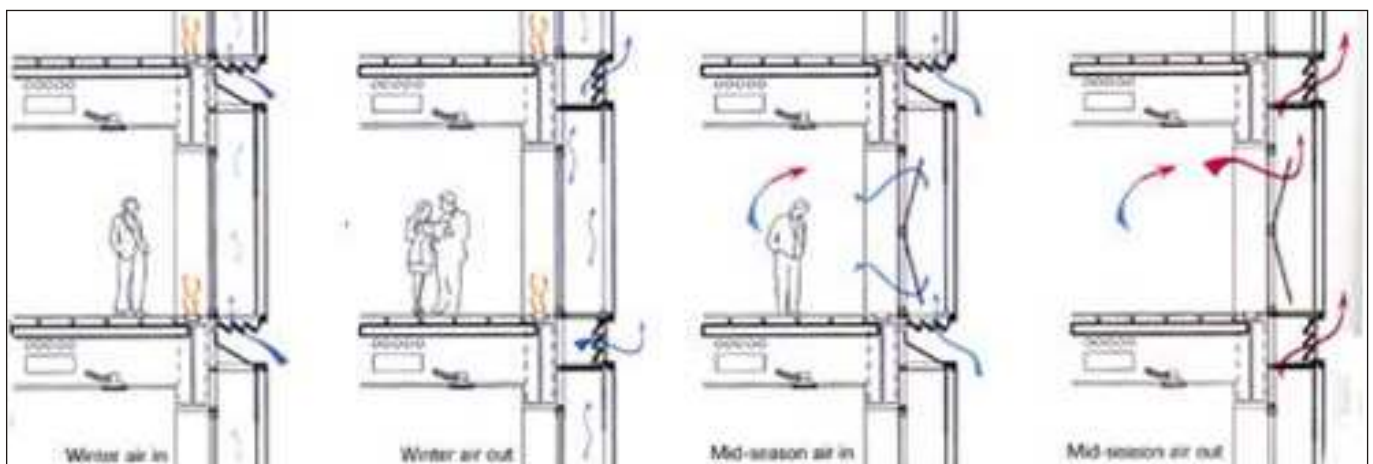
Extensive development of infrastructure around the world having its impact on the urban environment. The impact on the natural environment and to improve the performance of the buildings have become the main concerns of sustainable and low energy building practices. The design ideologies have been acknowledged by project teams to design and construct projects that are energy efficient, environmental friendly, and remarkable. Use of glazed façades in modern buildings gained popularity because of the views, indoor environment, and the building's reputation. These design approaches have significant impact on HVAC systems and its subsequent operational cost.

The optimally designed building façade is an important factor for achieving energy efficiency, as it works as the first frontier to face the intense heat and a major source of heat ingress into the buildings. All components of the building façade need to work together to regulate the indoor environment, responding to heating, cooling, ventilation, and natural lighting needs. It must balance requirements for ventilation and daylight while providing thermal protection appropriate to the local climatic conditions.

The dual skin façade can be simply defined as a system that consists of an external screen, a ventilated cavity and an internal screen. Solar shading is positioned in the ventilated cavity. The external and internal screens can be single glass or double glazed units, the depth of the cavity and the type of ventilation depend on environmental conditions, the desired envelope performance and the overall design of the building including environmental systems.

The dual skin facades rely on sun shading located in the intermediate or interstitial space between the exterior glass façade and interior façade to control solar loads. The concept is similar to exterior shading systems in that solar radiation loads are blocked before entering the building, except that heat absorbed by the between-pane shading system is released within the intermediate space, then drawn off through the exterior skin by natural or mechanical ventilative means. Cooling load demands on the mechanical plant are diminished with this strategy.

This concept is manifested with a single exterior layer of heat-strengthened safety glass or laminated safety glass,



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with exterior air inlet and outlet openings controlled with manual or automatic throttling flaps. The second interior façade layer consists of fixed or operable, double or single-pane, casement or hopper windows. Within the intermediate space are retractable or fixed Venetian blinds or roller shades, whose operation can be manual or automated. During cooling conditions, the Venetian blinds (or roller shades) cover the full height of the façade and are tilted to block direct sun. Absorbed solar radiation is either convected within the intermediate space or re-radiated to the interior and exterior. Low emittance coatings on the interior glass façade reduce radiative heat gains to the interior. If operable, the interior windows are closed. Convection within the intermediate cavity occurs either through thermal buoyancy or is wind driven. In some cases, mechanical ventilation is used to extract heat from the cavity.

The advantages of the dual skin facade application depend mainly on the characteristics of the site, the function of the building, and the design of the façade and its integration with the inner spaces. Dual skin facade can provide different functional approaches, including: a) cooling load control, b) improving thermal comfort and daylight, c) enhancing natural ventilation schemes, d) reducing operating costs by optimizing HVAC system and e) improving indoor environments and enhancing occupant health, comfort, and performance.

The use of dual skin facade techniques, integrated with solar control systems, light reductions systems, and ventilation systems, provides better solar protection that can reduce the effect of the external load and the cooling needs, and subsequently improve the performance of HVAC system and overall efficiency of the building.



ASHISH JAIN
AIID, MPM, FAAPM, LEED®
AP (O+M), IGBC AP
Sustainability Sr. Consultant

Key Experience

Ashish is a versatile and skilled professional with 10 years of comprehensive work experience. He is one of the founder members of Spectral Sustainability Group and currently working as Sustainability Senior Consultant of Spectral Sustainability Group. He is a certified Project Manager from American Academy of Project Management and one of the first two LEED AP's in India having specialty in the category of Building Operation and Maintenance.

Excellent hands-on experience in developing and improving organizational working processes and methodologies. Adaptable with experience across multiple projects nationally & internationally. Proven ability to plan, manage, control & deliver the high quality deliverables within the agreed deadlines with a meticulous attention to detail.

As a Sustainability professional, Ashish has a strong professional experience within the field of sustainable building design. He has worked on issues such as passive design strategies and energy efficient design of various building types through advanced BIM techniques. His core expertise is in advising Architects, Engineers and other professionals of the building industry in sustainability and positively influencing their designs in order to reduce energy consumption and the negative impacts on the environment.

Ashish is also Member of the Core Committee for up gradation of IGBC Green Homes Rating System.



AMOR KOOL
Sustainability Senior Consultant
SSG

Key Experience

Ashish is a versatile and skilled professional with 10 years of comprehensive work experience. He is one of the founder members of Spectral Sustainability Group (SSG) and currently working as Sustainability Senior Consultant of Spectral Sustainability Group. He is a certified Project Manager from American Academy of Project Management and one of the first two LEED AP's in India having specialty in the category of Building Operation and Maintenance.

Amor is working as Sustainability Consultant since 2011 at our Noida, Delhi office. An astute professional with strong architectural and construction background combined with coordination skills and management of resources.

Very enthusiastic to adopt and implement new concepts and technologies. Strongly believe in innovation and always searching for creative solutions. Extensive computer training, including knowledge of Graphics software, Building information modeling and Energy Simulation software.

He is been involved with many research projects ranging from View Shed Analysis through Global Information System (GIS), to Global Collaboration Process through 4D modeling, to find the difference in proposed and actual energy consumption of building and the reasons behind the change.

He has Merit of being an author of academic book on leadership "A Leadership Guide for the construction professional" and panel member of the committee writing addendum to NBC Part 11 "Approach to Sustainability".

He has also been actively writing many articles and papers on sustainability not only in terms of environment but targeting social and economic sustainability as well. He has actively involved in many forums pertaining to Micro, Small and Medium Enterprises (MSME).

Simultaneously, Mr. Amor is consulting and coordinating on several commercial projects to achieve overall sustainability through various strategies.

New ASHRAE Training and Workshop

Seminars & Courses at ASHRAE's Winter Conference and AHR Expo in Dallas, TX

2 Ways to Register

Internet : www.ashrae.org/dallascourses

Phone : Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Full Day Professional Development Seminar

\$485/\$395 ASHRAE Member -- Earn 6 PDH/.6 CEU or 6 AIA LU credits

The Commissioning Process in New & Existing Buildings –

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

Complying with Standard 90.1-2010 – Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

Data Center Energy Efficiency – Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

Energy Modeling Best Practices and Applications: HVAC/Thermal –

Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

Healthcare Facilities: Best Practice Design & Applications –

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

Half Day Short Courses

\$159/\$119 ASHRAE Member – Earn 3 PDH/.3 CEU or 3 AIA LU credits

Air-to-Air Energy Recovery Fundamentals – Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

Commissioning Process & Guideline 0 – Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Humidity Control: Applications, Control Levels and Mold Avoidance – Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Evaluating the Performance of LEED®-Certified Buildings – Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

Air-to-Air Energy Recovery Applications: Best Practices – Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

Optimization of HVAC Systems & Components: Techniques & Real-World Examples –

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

Application of Standard 62.1-2010: Multiple Spaces Equations & Spreadsheet –

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

Energy Management in New and Existing Buildings –

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

Combined Heat & Power: Design through Operations –

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

Avoiding IAQ Problems – Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

Understanding Standard 189.1-2011 for High-Performance Green Buildings –

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Designing Toward Net Zero Energy Commercial Buildings –

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

Understanding & Designing Dedicated Outdoor Air Systems –

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

Introduction to Ultraviolet Germicidal Irradiation (UVGI) Systems –

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Laboratory Design: The Basics and Beyond –

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

Visit www.ashrae.org/hvacdesign to register

HVAC Design Training

- Jan 14-18, 2013
- Jan 30-Feb 1, 2013 (Level I only)
- Mar 18-22, 2013
- Jun 3-7, 2013
- Aug 12-16, 2013

HVAC Design: Level I - Essentials

Gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

Registration is \$1239, \$989
(ASHRAE Member)

Enroll 3 or more participants from the same company and save!

HVAC Design: Level II - Applications

Developed by industry-leading professionals, the workshop provides participants with advanced level information about designing, installing and maintaining HVAC systems that can be put to immediate use. Participants will gain an in-depth look into Standards 55, 62.1, 90.1, and 189.1 and the Advanced Energy Design Guides, as well as a range of other HVAC topics including: HVAC equipment and systems; energy modeling; designing mechanical spaces; designing a chiller plant; and BAS controls.

Registration is \$829, \$679
(ASHRAE Member)

Enroll 3 or more participants from the same company and save!

ASHRAE India Night

ASHRAE INDIA CHAPTER organized 'ASHRAE Night' on Friday, December 21, 2012 at Crystal Room, Hotel Radisson Blu, Sector 13, Dwarka, New Delhi. The exciting program provided opportunity for networking within the ASHRAE fraternity. Members with their spouses attended the evening full of entertainment with Ghazals by Shazna Musical Group followed by dinner and drinks. The event was supported by:

Gold Partner : Daikin Airconditioning India Pvt. Ltd.

Silver Partner : Danfoss Industries Pvt Ltd.

Bronze Partner : Bry-Air Asia Pvt Ltd & K-Flex India Pvt. Ltd.

Table Partners : UP Twiga Fiberglass Ltd. & Acreconf India 2013





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6 Parallel Sessions

Twelve tracks running in six parallel sessions over two days focusing on Healthcare, Unitary, HVAC Systems, Datacenters, Green Materials, Low Carbon Footprint, Mixed use Development, BIM & other Advanced Technologies.

Catalogue Show

Coinciding catalogue show to see, feel and understand the latest products in building industry.

five
Reasons not to miss
ACRECONF 2013

Networking Opportunities

Conference will provide an excellent Networking opportunity and potential to expand business boundaries.

Details	1 Day Registration	Full Day Registration (2 Days)
Indian (INR)	4000 (INR)	6000 (INR)
International (USD)	240 (USD)	360 (USD)
On the spot Registration 8-9 Feb 2013	4800 (INR) 300 (USD)	7200 (INR) 425 (USD)
Remarks	Inclusive of service tax. INR fee is only applicable for Indian Nationals and USD for International Participants.	

Payment Can be made online @ www.acreconf.org,

Or through cheque / DD favouring "Delhi Chapter of ISHRAE ACRECONF INDIA"
Sent to: ACRECONF Secretariat, C/o Attitude Events Pvt Ltd

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CWI 01

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