Lighting Council New Zealand News - Autumn **2025**

Lightline

FROM **THE CHAIR** CHRIS BYRNE **LCNZ CHAIR**

The first quarter of 2025 has been challenging for many businesses in New Zealand, but there's a glimmer of hope (pun intended) on the horizon. The government is increasingly talking more positively about various infrastructure projects, and the ongoing reduction of the cash rate is gradually boosting confidence in investment and development. However, it's still tough for some businesses in the construction supply sector, who are continuing to struggle until some of these projects turn into actual construction.

From the Lighting Council's perspective, it's been a busy period with ongoing work in standards development both locally and internationally. Notably, the publication of ISO/CIE 8995-1:2025 marks the first international standard for indoor workplace lighting. This document offers a modern digitally-based adaptive lighting approach compared to the outdated AS/NZS1680 series, which was originally drafted 35 years ago. The next step is to see how this standard will be adopted in New Zealand.

In our last newsletter, I mentioned Professor John Hearnshaw's parliamentary petition on light pollution in New Zealand. Lighting Council of New Zealand (LCNZ) submitted a substantial response, advocating for better regulation of outdoor lighting and control at the regional level. Last year's parliamentary select committee investigation acknowledged the importance of this issue and requested a government response by March 2025. Unfortunately, the response published in March did not confirm any government action.

Their statement reads: *"The overall government conclusion is that they are not proposing any additional action in response to the report at this time and consider that the Resource Management Act (1991) provides flexibility for regions to manage light at night at a local level."*

While this is somewhat disappointing, it does show that the government is aware of the need for improved approaches and supports the lighting industry's efforts to advance discussions about tightening and NZ regulatory harmonisation with local government and other stakeholders in outdoor lighting. Certainly an area of potential for all parties involved in the procurement, management, or supply of outdoor lighting.

Below you will find the Autumn edition of our Lightline newsletter – enjoy the read.

LIGHTING COUNCIL NZ **WHO WE ARE AND WHAT WE DO**

Lighting Council New Zealand is an industry association with around thirty member companies, representing NZ lighting industry interests to government agencies, regulators, and other industry and professional associations, spanning commercial, industrial, municipal, and residential lighting.

More information on the LCNZ website: here.

NZ GOVERNMENT RESPONDS ON THE PUSH FOR LIGHT AT NIGHT ACTION

The deadline for the Government response to the findings of the Parliamentary Select Committee on light pollution findings was Tuesday 4 March.

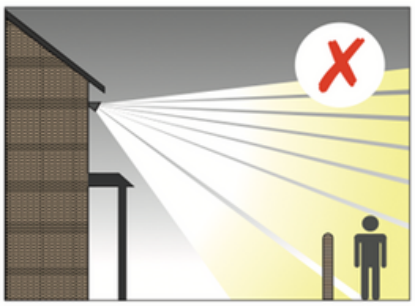
The Response report is on the NZ Parliament website. Weblink: Here

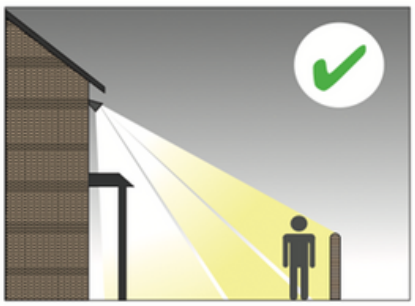
'Government Response to Report of Petitions Committee on Petition of John Hearnshaw: **New Zealand needs a national law to limit light pollution and promote dark skies'.**

'The overall Government conclusion is that they are not proposing any additional action in response to the report at this time and consider thathe Resource Management Act (1991) provides flexibility for regions to manage light at night at a local level.

The government states that it currently has a work programme on resource management reform, to replace the Resource Management Act (1991), and priority cannot be given to addressing light at night during the current reform phase.

This response indicates that government interventions are not likely to occur in the short term but this recent government/ community interaction has raised the awareness of the need for substantially improved approaches. This is perhaps the precursor for stakeholder collaboration to develop more effective and regionally harmonised local government requirements for light at night regulation in the medium term.



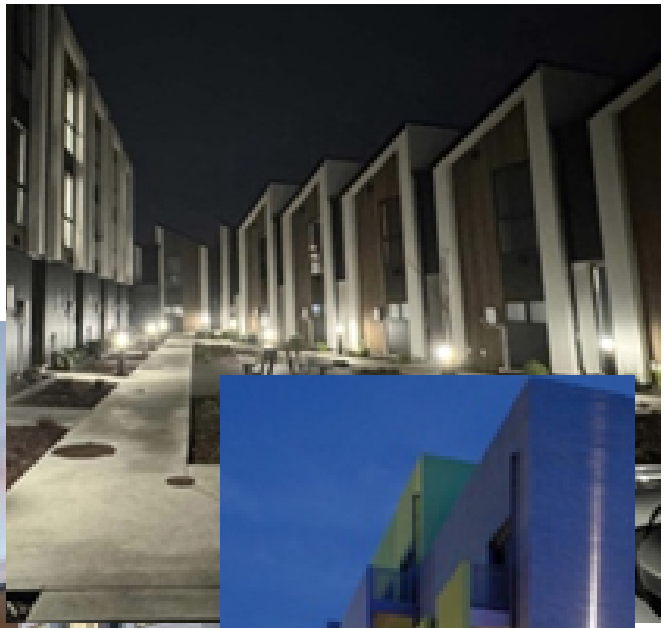


Lighting Council New Zealand is in communication with astronomical stakeholders, discussing ways forward to progress and improve light at night outcomes for New Zealand.

AUCKLAND COUNCIL - MEDIUM-DENSITY RESIDENTIAL OUTDOOR LIGHTING

Auckland Council has comprehensively revised its private-space outdoor lighting planning bylaw 'Unitary Plan - Section E24 Lighting' (E24). This lighting change is part of a wider 'Plan Change 79' (PC79) and was enacted by Auckland Council in August 2024.

Along with changes to traffic activity planning, there are major revisions of the outdoor lighting requirements for medium-density multi-unit residential housing.



LCNZ agrees that proper clarification of 'adequate lighting' for private outdoor spaces was overdue, and that the use of public lighting application standard AS/NZS 1158.3.1 brings a structure and methodology. However, it questions the mandatory requirement for lighting service levels appropriate for public spaces to be applied in private outdoor spaces.

The Position Paper (weblink below) highlights concern about unduly high light levels. This was presented to Auckland Council as part of a collective planning appeal. LCNZ is collaborating with the Illuminating Engineering Society of ANZ (IESANZ), the representative organisation for lighting professionals, as part of a collaborative appeal process, working via planning advisors Campbell Brown Consultants Ltd.

LCNZ and IESANZ are aiming to encourage Auckland Council to reconsider the mandatory regulated requirements, to address lighting application over-reach, and to clarify various technical aspects of the bylaw.

The list of PC79 appellants is on the council website: Here
The joint LCNZ/IESANZ Position Paper is on the LCNZ website: Here

AGED CARE

BETTER LIGHTING COULD REDUCE FALLS IN REST HOMES

The University of Auckland, Faculty of Medical and Health Sciences, Nursing, recently published a research study that showed many areas of care homes used by residents in long-term care facilities in Auckland had lighting levels below recommendations. Lower than recommended lighting levels contributes to higher rates of falls.

The title of the study is 'Shedding Light on Falls: The Effect of Lighting Levels on Fall Risk in Long-Term Residential Care Facilities'

The project leaders are Professor of Gerontology Ngaire Kerse, and Dr Catherine Bacon senior lecturer in the School of Nursing. The researchers found lower lighting levels in bathrooms, dining rooms and in facilities overall predicted higher fall rates. Many areas of care facilities, particularly bedrooms and bathrooms, were below recommended limits. The researchers say better lighting in care centres could reduce falls.

The study indicates that amber light LED strip luminaires around doors can improve spatial awareness in bedrooms and reduce falls in people with dementia. A recommendation was for education on the need for facilities to install brighter lighting and to use controls with occupant presence detection sensors to automatically turn lighting on when residents are moving around, especially in bedrooms and bathrooms.

The University of Auckland study concludes that lighting is an important consideration when creating an environment that encourages mobility and independence while establishing a safe environment.
The research is planned to progress to further stages. Prior to designing an intervention to test or compare lighting solutions for residential care, the researchers require more data to help determine what solutions are likely to be best practice. LCNZ is liaising with the researchers and are offering assistance by providing lighting technical information and industry resources.

See Scoop article : Here
See the UoA published scientific paper: Here
See Infographic which summarises the main findings: Here

EDUCATION

ONE-YEAR OPTION NOW AVAILABLE AT MASSEY

Massey University is now offering a fast-track way to obtain the lighting qualification - Graduate Certificate in Science and Technology (Lighting).

For the first time, two papers per semester can be undertaken, which means finishing in just one year instead of two. The basics are taught in Semester One, and then how to apply them in Semester Two. This is an online programme, so study can be from anywhere.

The well-established two-year pathway is still offered. Contact Susan Mander for more information and to help you choose the best enrolment pathway: S.Mander@massey.ac.nz

Enrolment details can be found on the Massey website: Here

ISO - THE FUTURE OF ENERGY PERFORMANCE OF BUILDINGS

In 2017 the European Commission introduced an Energy Performance of Buildings (EPB) Directive for mandatory regulation for energy performance reporting for large buildings within the European Union (EU). This was updated in 2024. To support the implementation of EPB directive, the ISO has developed a new holistic and integrated range of standards for EPB called the 52000 series. The new series of standards enables assessment of the overall energy performance of a building, using sector-by-sector energy calculation, that will allow building-to-building energy performance, benchmarking and comparability.

The ISO TC 274 Lighting standards committee is playing its part, developing lighting design, energy and systems commissioning standards that dovetail with the 52000 series. The standardised ISO lighting energy methods (now adopted as NZS 20086) are based on principles in the newly published ISO/CIE 8995-1:2025 lighting application and design standard.

As the world's largest trading bloc, the trade influence of the EU is felt globally, and any application standards developed for this region are likely to spread world-wide. The ISO/CIE 8995-1:2025 application standard is currently under consideration for adoption as an AS/NZS standard, replacing the longstanding, but now obsolete, AS/NZS 1680 series.

The list below gives the proposed structure of the series of parts and sub-parts, and the standards and companion technical reports for energy related building services. The ISO 52007 series application and design publications will include the following ten topics:

- Part 1 Overarching Standard
- Part 2 Overarching Technical Report
- Part 3 Thermal Comfort - Standard
- Part 4 Thermal Comfort - Technical Report and Guidance
- Part 5 Indoor Air Quality Standard
- Part 6 Indoor Air Quality - Technical Report and Guidance
- Part 7 Lighting - Standard
- Part 8 Lighting Technical Report and Guidance
- Part 9 Acoustic - Standard
- Part 10 Acoustic Technical Report and Guidance

ISO 52007-7 will be the lighting energy International Standard. This will be ISO/CIE 20086:2022 (aka NZS 20086:2022) updated with the newly designated publication number ISO 52007-7, at the next ISO review.

ISO 52007-8 will be the lighting energy explanatory Technical Report. This will be ISO/CIE TR 3092:2024 (aka SNZ TR 3092:2024) updated with the new number, ISO 52007-8, at the next review.

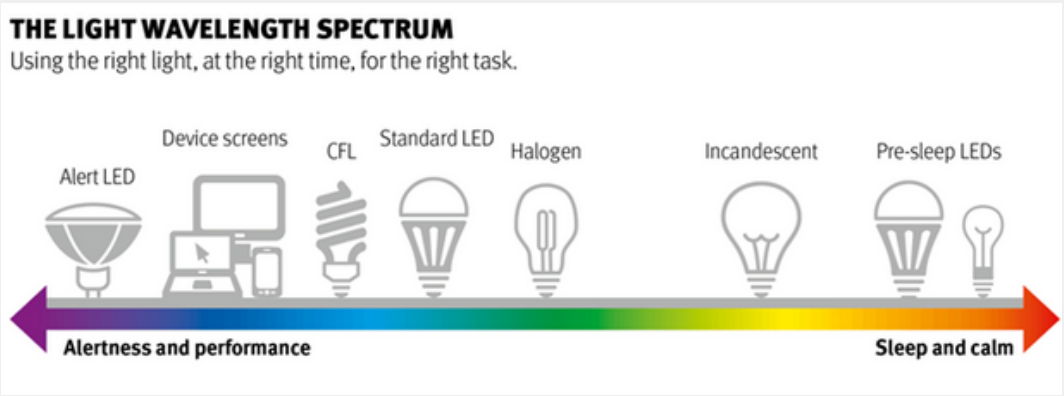
Use of these lighting energy standards is based on the use of the adaptive lighting application methodologies detailed in ISO/CIE 8995-1:2025. When/if this application standard is adopted NZ will have a very up to date and globally-aligned trio of lighting application and energy performance standards. At that point NZ Building Code regulator MBIE-BSP may consider following the international lead on incorporating EPB integrated methods as part of the whole of building energy and emissions reporting requirements.

NEW STANDARD ISO/CIE 8995-1 LIGHTING OF WORK PLACES

The updated international lighting application standard ISO/CIE 8995-1:2025 has just been published. ISO CIE 8995-1:2025 Light and lighting - Lighting of work places - Part 1: Indoor.
This is a joint ISO and CIE publication developed by ISO committee TC 274 'Light and Lighting' which includes NZ expert representatives.

This refreshed standard for commercial and industrial workplace lighting is a game-changing publication that facilitates flexible solutions and optimisation methods that are intended to exploit the advantages and value (visual comfort, ergonomic performance, financial returns) of advanced LED luminaires, sensor detection, and smart connected lighting control systems.

The standard incentivises adaptive lighting techniques via real-time dimming, occupancy sensing and daylight integration, and supports the well-established EU and UK energy performance metric, Lighting Energy Numeric Indicator (LENI) (kWh/m2/Yr). This approach synchronises with the calculation methods included in the recently published NZ lighting energy performance publications NZS 20086:2022 and SNZ TR 3092:2024.



ISO/CIE 8995-1:2025 embodies an advanced 'step-change' approach in comparison with the existing AS/NZS 1680.1:2006 standard. The design methods liberate designers to use their professional judgement on a case by case basis rather than be tied to strategic decisions using a 'paint by numbers' approach:-

- No longer limited light spectral options
- No longer blanketed light operating over all the area
- No longer highest light levels operating all the time
- Consideration of integrative (human centric) lighting
- Consideration of light for an ageing population

The standards Australia committee LG-001 Lighting will be reviewing the ISO/CIE standard with a view to the possible adoption or adaption as an AS/NZS standard to replace the obsolete AS/NZS 1680.1:2006, which does not accommodate lighting application using LED technology or smart adaptive controls. The New Zealand expert representatives on the Standards Australia LG-001 committee are Chris Byrne (LCNZ) and Ewen Cafe (IESANZ).

For commercial and industrial lighting stakeholders this is a very important topic to monitor in the near-term future.

ISO information on the new standard: Here

LCNZ FUNDING FOR IEC LUMINAIRE STANDARDS PARTICIPATION

As many will be aware, there is a crisis of funding to adequately support Standards New Zealand's role in the administration of NZ involvement in IEC and ISO standards, and the adaption or adoption of international publications as NZS or AS/NZS standards.

With recent cuts to public sector budgets, a number of government regulators are withdrawing funding for the work of essential technical committees and their resultant standards publications that provide the foundation for the regulation of safety and other essential building performance aspects.

Stemming from the NZ Standards and Accreditation Act 2015, the current user-pays standards development model requires financial contributions from third parties. For jointed standards, the project fee constitutes the costs incurred by both Standards New Zealand and Standards Australia for New Zealand's participation in the standards development project. Without funding, New Zealand is not able to participate in the review of a joint standard, and the updated standard becomes an Australia-only standard.

In addition to the jointed AS/NZS standards funding issue, there are also funding requirements for participation as a NZ National Committee on IEC (product related) and ISO (application related) standards committees. There are two tiers of committee involvement, P-Member (Participating) and O-Member (Observer). Only P-Members have voting rights and access to committee documents.

The IEC TC 34 Lighting committee is the cornerstone international committee for safety and performance of lighting products and systems. TC 34 meets for working group and plenary meetings in three two-week sessions per year. LCNZ has been a P-Member of TC 34 for over twenty years, with a 95% participation record at many global venues, with travel and expert representation costs fully funded by LCNZ.

Due to government funding cuts the TC 34 luminaire committee is no longer funded by MBIE, and NZ membership was abruptly set for demotion to O-Member status as of early 2025. As a stop-gap measure to avoid losing the hard-won position of NZ as a solidly contributing P-Member, LCNZ has reluctantly paid this year's $3,500 annual fee.

LCNZ will be following up over 2025 with government and related NGO engagement in an attempt to secure a fair and financially sustainable cost-share model without the abrupt ad hoc funding requests that our industry has experienced in recent times.

LED LUMINAIRE PERFORMANCE GUIDE

Brussels based industry association LightingEurope (LE) has recently published Luminaire Performance Guide 'Guiding Paper Evaluating performance of LED based luminaires' to assist with evaluating the performance of LED luminaires. Despite the European focus, this is a very useful reference for New Zealand lighting practitioners.

The aim of the Guiding Paper is to provide support to users such as specifiers, lighting designers, design engineers, and policy makers regarding LED luminaires for commercial lighting projects. The document was developed to clarify and harmonise the factors and data used to evaluate the performance of LED luminaires. The complexity of factors and data used in the lighting sector can be confusing for consumers and policymakers.

Awareness of a harmonised way to allow a 'like-for-like' comparison and easy evaluation of manufacturers' performance data is essential when specifying LED luminaires for lighting projects or for writing tender procurement specifications. This publication puts emphasis on explaining the 'useful life' performance requirements to address the issue of excessive and expanding lifetime claims by recommending a fixed set of performance data for LED luminaires. This data set is focused on the information necessary for lighting application design.

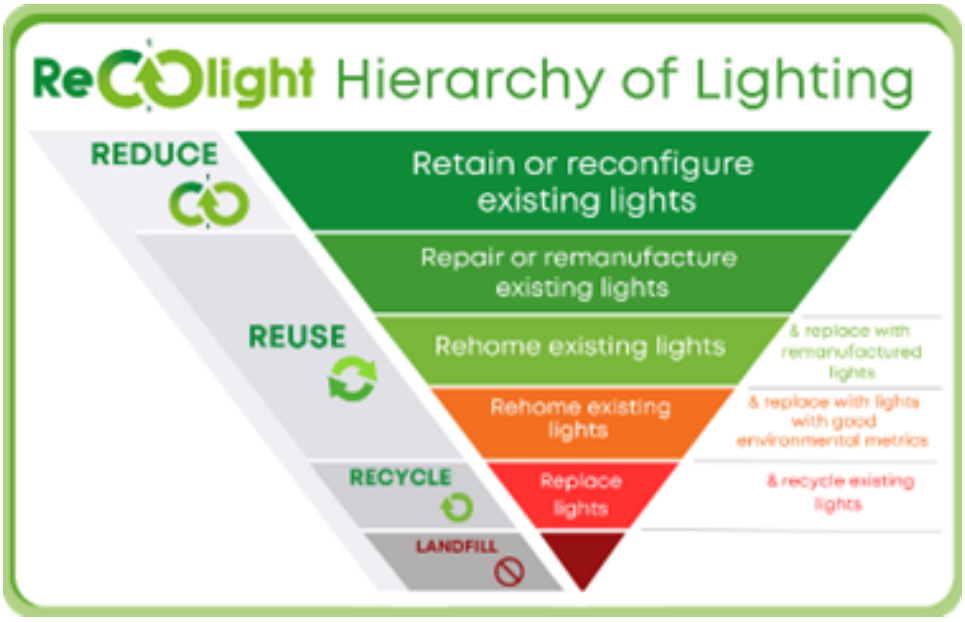
The technical standards explored are European Norm (EN) standards, however most these have direct AS/NZS equivalents.

LE Guiding Paper download: Here

BS 8887-221:2024 REMANUFACTURE OF LUMINAIRES

A long-awaited British Standard for the remanufacture of luminaires has now been published:BS 8887-221:2024 Design for manufacture, assembly, disassembly and end-of-life processing (MADE). Remanufacture of luminaires. Code of Practice.

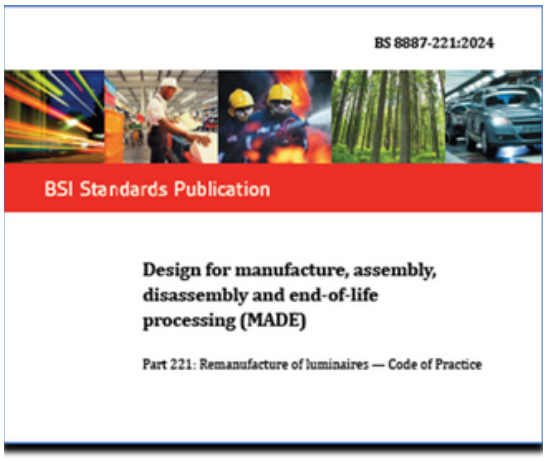
This publication is a major step forward, and was developed by experts from manufacturers,luminaire designers, lighting designers, and the UK Lighting Industry Association (LIA). It is currently the only publication of its type, and codifies and validates the process of remanufacturing and covers the reuse, repair, or remanufacture of luminaires.



Remanufacturing - Waste Hierarchy Triangle

It will give confidence to specifiers, producers, end users, that luminaires remanufactured in accordance with the requirements are compliant with relevant product standards and building codes, and are fit for purpose.

The pressure for change is from the UK government regulation to progress the performance of commercial buildings towards net-zero emissions, based on product embodied energy as well as their operational energy. Remanufacturing will play a key role in future carbon reduction and waste mitigation strategies. The UK is well ahead of most other countries in the practical application of circular economy principles and the development of quantified methods for determining the environmental performance of products and buildings.



This is currently a UK regional standard but is very likely to be adopted by the IEC for adaption to become an international IEC standard, which could then possibly be adopted as a NZS. Remanufacture may seem a complicated option, but sooner or later NZ government regulators are likely to prioritise such approaches, and this could be a preferred option for lighting procurement, creating a viable new business niche for NZ lighting suppliers.

British Standards Link: Here
Recolight YouTube Link: Here

MEMBER PROFILE

Carl Moselen

KKDC Lighting

KKDC NZ Ltd is an established LED lighting manufacturer and distributor specialising in professional, integrated linear lighting solutions for use within a wide range of architectural projects and applications.

Targeting the high-end specification market with both interior and exterior options and various LED types, KKDC has built up a strong reputation within the NZ lighting sector as being able to offer an extensive and precise range of consistent white CCT LED luminaire options, with custom variations to meet the demands of sophisticated projects and large scale application.

In addition to building lighting, KKDC provide a fully customisable system of individually controllable linear LED modules that can be inset within shop fittings, displays, shelves, joinery, and architectural elements.

With extensive electronic engineering expertise from a Korean R&D team, development and manufacturing takes place in Seoul, South Korea. KKDC uses a network of professional local distributors in multiple markets and is well positioned to provide complete LED lighting solutions to meet the demands of designers and architects across a wide variety of projects.

Managing Director of KKDC NZ is Carl Moselen. Following an early background in physics and mechanical engineering in NZ, Carl progressed to overseas experience in the UK in premium architectural relationship sales, including Business Development Manager for Lumino Lighting Ltd, and as Lighting Manager for the iconic retailer Selfridges of Oxford St London.

KKDC NZ has very accessible studio and demonstration space in CBD central Auckland within the historic Tasman Building in lower Anzac Avenue.

MEMBER PROFILE

Tony Tavita

Legrand NZ Ltd

Legrand is a global specialist in products and systems for electrical and lighting installations and digital building infrastructures. The global Legrand network has a presence in more than 90 countries and a workforce of more than 39,000 people.

Whilst a global company, Legrand are very local in their approach and committed to investing in their ANZ operations to offer tailored solutions for this market. Legrand ANZ designs, manufactures, and distributes under both the Legrand and HPM brands, with power, lighting, emergency lighting, and cabling products, supplying comprehensive solutions across the commercial building and infrastructure sectors.

Legrand was originally formed in 1904 by Frederic Legrand when he took over a porcelain factory in Limoges France and commenced manufacturing of electrical insulation products. In 1950 HPM Australia was formed to produce plugs and sockets. In 2007 HPM was acquired and joined the Legrand Group, with ANZ distribution now an amalgam of the Legrand and HPM product lines. In recent times, connected emergency lighting systems have been a particular focus. Smart building emergency lighting systems with wireless monitoring and testing functions are the new leading edge of lighting technology.

NZ Business Development Manager Tony Tavita has been with Legrand NZ for the last eight years. He has an extensive lighting industry business development background and has been a Senior Lighting Designer at several large NZ engineering consultancies, specialising in commercial lighting and emergency lighting systems. Tony is the LCNZ representative on the Standards Australia LG-007 emergency lighting committee, which oversees the AS/NZS 2293 series of standards.